Statement of Basis

Tier I Operating Permit No. T1-2014.0031 Project ID 61408

> **Bennett Lumber Products** Princeton, Idaho

Facility ID 057-00008

Final

March 23, 2017

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Permit Writer

The purpose of this Statement of Basis is to set forth the legal and factual basis for the Tier I operating permit terms and conditions, including references to the applicable statutory or regulatory provisions for the terms and conditions, as required by IDAPA 58.01.01.362

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1. ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

acfm actual cubic feet per minute

ASTM American Society for Testing and Materials

BACT Best Available Control Technology

BMP best management practices

Btu British thermal unit CAA Clean Air Act

CAM Compliance Assurance Monitoring
CEMS continuous emission monitoring systems

cfm cubic feet per minute

CFR Code of Federal Regulations

CI compression ignition

CMS continuous monitoring systems

CO carbon monoxide CO₂ carbon dioxide

CO₂e CO₂ equivalent emissions

COMS continuous opacity monitoring systems
DEQ Department of Environmental Quality

dscf dry standard cubic feet

EPA U.S. Environmental Protection Agency

GHG greenhouse gases gph gallons per hour gpm gallons per minute

gr grains (1 lb = 7,000 grains)
HAP hazardous air pollutants
HHV higher heating value

hp horsepower

hr/yr hours per consecutive 12 calendar month period

ICE internal combustion engines

IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance

with the Idaho Administrative Procedures Act

iwg inches of water gauge

km kilometers lb/hr pounds per hour

m meters

MACT Maximum Achievable Control Technology mg/dscm milligrams per dry standard cubic meter

MMBtu million British thermal units MMscf million standard cubic feet

MRRR Monitoring, Recordkeeping and Reporting Requirements
NESHAP National Emission Standards for Hazardous Air Pollutants

NO₂ nitrogen dioxide NO_x nitrogen oxides

NSPS New Source Performance Standards

O&M operation and maintenance

 O_2 oxygen

PC permit condition PM particulate matter

PM_{2.5} particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5

micrometers

PM₁₀ particulate matter with an aerodynamic diameter less than or equal to a nominal 10

micrometers

ppm parts per million

ppmw parts per million by weight

PSD Prevention of Significant Deterioration

psig pounds per square inch gauge

PTC permit to construct
PTE potential to emit
PW process weight rate

RICE reciprocating internal combustion engines
Rules Rules for the Control of Air Pollution in Idaho

scf standard cubic feet

SIP State Implementation Plan

SO₂ sulfur dioxide SO_x sulfur oxides

T/day tons per calendar day

T/hr tons per hour

T/yr tons per consecutive 12 calendar month period

T1 permit Tier I operating permit
T2 permit Tier II operating permit
toxic air pollutants

T-RACT Toxic Air Pollutant Reasonably Available Control Technology

ULSD ultra low sulfur diesel U.S.C. United States Code

VOC volatile organic compound

2. INTRODUCTION AND APPLICABILITY

Bennett Lumber Products Inc. (BLP) produces kiln dried dimensional lumber and is located at 3759 Highway 6, east of Princeton, Idaho. The facility is classified as a major facility, as defined by IDAPA 58.01.01.008.10.c, because it emits or has the potential to emit PM₁₀, CO and VOC's above the T1 major source threshold of 100 tons-per-year. BLP is not a T1 major source of HAP emissions because its potential to emit HAP is limited to less than the major source thresholds of 10 tons-per-year for any single HAP and/or 25 tons-per-year for any combination of HAP by a federally enforceable PTC¹.

BLP is required to apply for a Tier I operating permit pursuant to IDAPA 58.01.01.301. The application for a Tier I operating permit must contain a certification from BLP as to its compliance status with all applicable requirements (IDAPA 58.01.01.314.09).

IDAPA 58.01.01.362 requires that as part of its review of the Tier I application, DEQ shall prepare a technical memorandum (i.e. statement of basis) that sets forth the legal and factual basis for the draft Tier I operating permit terms and conditions including reference to the applicable statutory provisions or the draft denial. This document provides the basis for the draft Tier I operating permit for BLP.

The format of this Statement of Basis follows that of the permit. BLP's T1 permit is organized into sections. They are as follows:

Section 1 - Acronyms, Units, and Chemical Nomenclature

The acronyms, units, and chemical nomenclature used in the permit are defined in this section.

Section 2 - Tier I Operating Permit Scope

The scope describes this project.

Section 3 - Facility-wide Conditions

This section contains the applicable requirements (permit conditions) that apply facility-wide. Where required, monitoring, recordkeeping and reporting requirements (MRRR) sufficient to assure compliance with a permit condition follows the permit condition.

Sections 4 through 7 - Emission Units/Source Names

Sections 4 through 7 contain the applicable requirements that specifically apply to each regulated emissions unit. Some requirements that apply to an emissions unit (e.g. opacity limits) may be contained in the facility-wide conditions section. As with the facility-wide conditions, monitoring, recordkeeping and reporting requirements (MRRR) sufficient to assure compliance with an applicable requirement follows the applicable requirement.

Section 8 - Compliance Assurance Monitoring (CAM) - 40 CFR 64

Section 8 contains the CAM Plan and CAM requirements for the Pollutant-Specific Emissions Unit (PSEU) as defined by 40 CFR 64.1 (the Hog Fuel Boiler is the PSEU).

Section 9 - Insignificant Activities

This section contains a list of units or activities that are insignificant on the basis of size or production rate. Units and activities listed in this section must be listed in the permit application. The regulatory

1 Facility-wide HAP emissions are limited to 9.49 T/yr for any single HAP and 24.49 T/yr for any combination of HAP's by PTC No. P-2007.0107, issued 01/17/2011

citation for units and activities that are insignificant on the basis of size or production rate is IDAPA 58.01.01.317.01.b.

Section 10 - General Provisions

The final section of the permit contains standard terms and conditions that apply to all major facilities subject to IDAPA 58.01.01.300. This section is the same for all Tier I facilities. The General Provisions have been reviewed by EPA and contain all terms and conditions required by IDAPA 58.01.01 et al as well as requirements from other air quality laws, rules and regulations. Each general provision has been paraphrased so it is more easily understood by the general public; however, there is no intent to alter the effect of the requirement. Should there be a discrepancy between a paraphrased general provision in this statement of basis and a rule or permit, the rule or permit shall govern.

3. FACILITY INFORMATION

3.1 Facility Description

BLP produces kiln dried dimensional lumber. The facility includes a sawmill, two planer mills, one hog fuel boiler, seven steam-heated lumber drying kilns, and one emergency fire pump engine.

Logs from the log yard are debarked, sized, and cut into green dimension lumber at the sawmill. The green lumber is then dried to a pre-determined moisture level in a series of steam-heated drying kilns. Saturated steam from the hog fuel boiler is used to heat the kilns to dry the lumber. The dried lumber is surfaced and finished in the planer mills.

Processes within the sawmill and planer mills are sources of PM and PM₁₀ emissions. Sawdust from the sawmill and planer shavings and chips from the planer mills are pneumatically conveyed by cyclones to hog fuel storage to be used as boiler fuel. Excess wood waste generated at the sawmill and planer mills that is not used as boiler fuel is pneumatically conveyed to storage bins for subsequent off-site disposal by haul trucks.

3.2 Facility Permitting History

Tier I Operating Permit History - Previous 5-year Permit Term-2010 to 2015

The following information is the permitting history of this Tier I facility during the previous five-year permit term which was from February 11, 2010 to February 11, 2015. This information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

January 17, 2011	DEQ issued a Tier I administrative amendment (Project 60630) to incorporate revised PTC No. P-2007.0107 Project 60629, and to update CAM language and include CAM indicators. (A) Permit status will change to (S) upon issuance of this T1 permit renewal.
August 2, 2010	DEQ issued a Tier I administrative amendment (Project 60528) to incorporate revised PTC No. P-2007.0107 Project 60527. (S)
February 11, 2010	DEQ issued Tier I operating permit renewal number T1-050201. This permit was the first renewal of the facility's T1 permit. (S)

Underlying Permit History - Includes every underlying permit issued to this facility

The following information is the comprehensive permitting history of all underlying applicable permits issued to this Tier I facility. This information was derived from a review of the permit files available to DEO. Permit status is noted as active and in effect (A) or superseded (S).

January 17, 2011	PTC No. P-2007.0107, Project 60629 – correct typographical errors and includes
	the requirements of 40 CFR 63, Subpart ZZZZ for the fire pump engine (A)

August 2, 2010	PTC No. P-2007.0107 Project 60527 – correct a typographical error in the performance testing permit condition (S)
October 7, 2009	PTC No. P-2007.0107 – incorporate Consent Order E-060014 and PTC No. 050026; increase the throughput through the kilns from 97.2 thousand board feet (lumber scale) to 157,585 thousand board feet (lumber scale); and limit HAP emissions below T1 major source threshold levels. (S)
October 6, 2005	PTC No. 050206 – install/construct new lumber drying kiln #7.(S)
January 13, 2005	PTC/T2 Permit No. T2-010208 – T1 compliance schedule required permit (S)
May 25, 1977	PTC issued for the construction of the hog fuel boiler. (S)

4. APPLICATION SCOPE AND APPLICATION CHRONOLOGY

4.1 Application Scope

This project is the renewal of the facility's T1 permit. It is the second renewal of BLP's T1 permit.

4.2 Application Chronology

August 12, 2014	DEQ received an application.
October 10, 2014	DEQ determined that the application was complete.
February 20, 2015	DEQ made available the draft permit and statement of basis for peer and regional office review.
March 27, 2015	DEQ made available the draft permit and statement of basis for applicant review.
August 22, 2016	DEQ made available the draft permit and statement of basis for peer and regional office review for a second time.
August 29, 2016	DEQ made available the draft permit and statement of basis for applicant review for a second time.
Sept. 21 – Oct. 21, 2016	DEQ provided a public comment period on the proposed action.
February 1, 2017	DEQ provided the proposed permit and statement of basis for EPA review.
March 23, 2017	DEQ issued the final permit and statement of basis.

5. EMISSIONS UNITS, PROCESS DESCRIPTION(S), AND EMISSIONS INVENTORY

This section lists the emissions units, describes the production or manufacturing processes, and provides the emissions inventory for this facility. The information presented was provided by the applicant in the permit application. Also listed in this section are the insignificant activities based on size or production rate.

5.1 Process No. 1 – Hog Fuel Boiler

Table 5.1 lists the emissions units and control devices associated with the Zurn hog fuel boiler.

Table 5.1 EMISSIONS UNITS, CONTROL DEVICE, AND DISCHARGE POINT INFORMATION

Emissions Unit ID No. Emissions Unit Description		Control Device (if applicable)	Emission Point ID No.
Hog Fuel Boiler Zurn Industries boiler		Multiclone in series with a wet scrubber	Wet scrubber stack

The Zurn Industries hog fuel boiler, installed in 1978, is designed to continuously provide 60,000 pounds of saturated steam per hour at 250°F to the lumber drying kilns. The boiler operates continuously except during one week of shutdown for maintenance. On or around 2012, BLP installed an oxygen trim system on the boiler. The oxygen trim system is designed to continuously measure and maintain an optimum airto-fuel ratio in the boiler combustion zone, the result of which is less fuel used and lower emissions.

The control device includes a mechanical cyclone separator that eliminates cyclonic air flow from the wet scrubber. It has no effect on emissions.

5.2 Process No. 2 – Drying Kilns

Table 5.2 lists the emissions units and control devices associated with drying kilns.

Table 5.2 EMISSIONS UNITS, CONTROL DEVICE, AND DISCHARGE POINT INFORMATION

Emissions Unit ID No.	Emissions Unit Description	Control Device (if applicable)	Emission Point ID No.
Drying Kilns	No. 1-7	None	Kiln roof vents

The moisture content of green dimensional lumber is reduced from around 43-47% to around 19% in the drying kilns.

5.3 Process No. 3 – Woodworking Equipment

Table 5.3 lists the emissions units and control devices associated with sawmill.

Table 5.3 EMISSIONS UNITS, CONTROL DEVICE, AND DISCHARGE POINT INFORMATION

Emissions Unit Description	Control Device (if applicable)		
Sawmill and Planer mills	Cyclones		

Woodworking equipment includes processes within the sawmill that reduce logs into green dimensional lumber, and processes within the planer mills that surface and finish dried dimensional lumber.

5.4 Process No. 4 – Compression Ignition Emergency Internal Combustion Engine

Table 5.4 lists the emissions units and control devices associated with emergency fire-pump engine.

Table 5.4 EMISSIONS UNITS, CONTROL DEVICE, AND DISCHARGE POINT INFORMATION

Emissions Unit Description	Control Device (if applicable)		
CI Emergency Fire Pump Engine	None		

This facility includes a stationary compression ignition emergency internal combustion fire pump engine. The engine is subject to the area source RICE MACT, 40 CFR 63, Subpart ZZZZ. The engine is a 270 bhp, John Deere engine, Serial Number 6081AF001.

5.5 Insignificant Emissions Units Based on Size or Production Rate

This section contains a list of units or activities that are insignificant on the basis of size or production rate. Units and activities listed in this section must be listed in the permit application. Table 5.5 lists the units and activities which have been determined to be insignificant on the basis of size or production rate. The regulatory authority for these emissions units and activities is IDAPA 58.01.01.317.01.b.

Table 5.5 INSIGNIFICANT EMISSION UNITS AND REGULATORY AUTHORITY/JUSTIFICATION

List of Insignificant Activities (IDAPA 58.01.01.317.01.b)					
Truck bark bin	Truck sawdust bin	Truck chip bin	Boiler fuel storage		
Auxiliary fuel bin	Shavings truck bin	Log yard waste 1	Log yard waste 2		
Rock storage	Ash storage	Hog fuel in-feed conveyor	Bark conveyor system		
Hog fuel out-feed conveyor	Bark screen oversize	Deck trash conveyor	Truck bark bin conveyor		
Boiler bark conveyor	Sawdust conveyor-vibrator	Chip oversize conveyor	Main fuel conveyor		
Auxiliary fuel bin conveyor	Flyash transport	Small log debarker	Large log debarker		
Bark hog	Bark screen	Chip screen	20,000-gallon diesel fuel tank 1		
2,000-gallon gasoline tank	2,500 gallon diesel fuel tank	1,000-gallon stove oil lank	20,000-gallon diesel fuel tank 2		
30-gallon parts washer 1	30-gallon parts washer 2	30-gallon parts washer 3	2,000-gallon aviation fuel tank		
1,000-gallon used oil tank	2,000 cubic yard rock storage				

5.6 Non-applicable Requirements for Which a Permit Shield is Requested

This section of the permit lists the regulations for which the facility has requested, and DEQ proposes to grant, a permit shield pursuant to IDAPA 58.01.01.325. The findings on which this shield is based are presented below:

- Requirements for Which a Permit Shield Will Be Granted
 - No permit shield was requested
- Requirements for Which a Permit Shield Will Not Be Granted
 - No permit shield was requested

5.7 Emissions Inventory

The primary sources of emissions from this facility are the hog fuel boiler and the lumber drying kilns. The facility-wide PTC issued to this facility (P-2007.0107, issued 1/17/2011) limits PM_{10} and CO from the boiler, and PM_{10} and VOC's from the kilns. Short-term PM_{10} emissions from the boiler are limited to protect the 24-hour PM_{10} NAAQS. CO emissions from the boiler are limited as a PSD avoidance limit. The PM_{10} and VOC emissions limits from the kilns represent the PTE of the kilns at the allowable throughput to the kilns -157,585 thousand board feet (lumber scale).

The emissions inventory (EI) for this T1 facility is summarized in Table 5.6. All values are expressed in units of tons-per-year and represent the facility-wide potential to emit. Potential to emit is defined as the maximum capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hour of operation or on the

type or amount of material combusted, stored or processed shall be treated as part of its design if the limitation or the effect it would have on emission is state or federally enforceable.

The source of the emission factors used for the EI is documented in DEQ's records for this facility.

Table 5.6 EMISSIONS INVENTORY - POTENTIAL TO EMIT (T/yr)

Source Description	PM ₁₀ T/yr	NOx T/yr	SO ₂ T/yr	CO T/yr	VOC T/yr	Facility- wide HAP's T/yr
Hog Fuel Boiler	99.48	70.22	7.98	249	12.13	> 9.49 any
Drying Kilns 1 through 7 combined emissions	3.94	N/A	N/A	N/A	110.3	single HAP,
Emergency Fire Pump Engine		0.73		0.02		> 24.49 any combination
Total Emissions	103.42	70.95	7.98	249.02	122.163	HAP

6. EMISSIONS LIMITS AND MRRR

This section contains the applicable requirements for this T1 facility. It is divided into the following subsections:

- Facility-Wide Conditions;
- Hog Fuel Boiler Emissions Limits;
- Drying Kilns Emissions Limits;
- Woodworking Equipment Emissions Limits;
- Compression Ignition Emergency Internal Combustion Engine Emissions Limits;
- Compliance Assurance Monitoring 40 CFR 64
- Insignificant Activities Emissions Limits;
- Tier I Operating Permit General Provisions.

MRRR

Monitoring, recordkeeping and reporting requirements (MRRR) are the means with which compliance with an applicable requirement is demonstrated. In this section, the applicable requirement (permit condition) is provided first followed by the MRRR. Should an applicable requirement not include sufficient MRRR to satisfy IDAPA 58.01.01.322.06, 07, and 08, then the permit must establish adequate monitoring, recordkeeping and reporting sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit (aka, "gap filling"). In addition to the specific MRRR provided for each applicable requirement, generally applicable facility-wide conditions and general provisions may also be provided, such as performance testing, reporting, and certification requirements.

The legal and factual basis for each permit condition is provided for in this document. If a permit condition was changed due to facility draft comments or public comments, an explanation of the changes is provided.

State Enforceability

An applicable requirement that is not required by the federal CAA and has not been approved by EPA as a SIP-approved requirement is identified as a "State-only" requirement and is enforceable only under state law. State-only requirements are not enforceable by the EPA or citizens under the CAA. State-only requirements are identified in the permit within the citation of the legal authority for the permit condition.

Federal Enforceability

Unless identified as "State-only," all applicable requirements, including MRRR, are state and federally enforceable. It should be noted that while a violation of a MRRR is a violation of the permit, it is not necessarily a violation of the underlying applicable requirement (e.g. emissions limit).

To minimize the length of this document, the following permit conditions and MRRR have been paraphrased. Refer to the permit for the complete requirements.

6.1 Facility-Wide Conditions

Permit Condition 3.1 - Fugitive Dust

All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

[IDAPA 58.01.01.650-651, 4/11/15]

MRRR (Permit Conditions 3.2, 3.3 and 3.4)

- Monitor and maintain records of the frequency and the methods used to control fugitive dust emissions;
- Maintain records of all fugitive dust complaints received and the corrective action taken in response to the complaint;
- Conduct periodic facility-wide inspections of all sources of fugitive emissions. If any of the sources of fugitive dust are not being reasonably controlled, corrective action is required.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

Permit Condition 3.5 – Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

[IDAPA 58.01.01.775-776 (State-only), 5/1/94]

MRRR (Permit Condition 3.6)

- Maintain records of all odor complaints received and the corrective action taken in response to the complaint;
- Take appropriate corrective action if the complaint has merit, and log the date and corrective action taken.

[IDAPA 58.01.01.322.06, 07 (State-only), 5/1/94]

Permit Condition 3.7 - Visible Emissions

The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.

[IDAPA 58.01.01.625, 4/5/00]

MRRR (Permit Conditions 3.8 and 3.9)

- Conduct periodic facility-wide inspections of all potential sources of visible emissions (or use continuous opacity monitoring);
- If visible emissions are observed, take appropriate corrective action and/or perform a Method 9 opacity test;
- Maintain records of the results of each visible emissions inspection.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

Permit Conditions 3.10, 3.11, 3.12, and 3.14 - Excess Emissions

The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions. The provisions of IDAPA 58.01.01.130-136 shall govern in the event of conflicts between the excess emissions facility wide conditions and the regulations of IDAPA 58.01.01.130-136.

MRRR (Permit Conditions 3.10 through 3.14)

Monitoring, recordkeeping and reporting requirements for excess emissions are provided in Sections 131 through 136.

- Take appropriate and reasonable action to correct, reduce, and minimize emissions from excess emissions events;
- Prohibit excess emissions during any DEQ Atmospheric Stagnation Advisory or Wood Stove Curtailment Advisory;

- Notify DEQ of any upset, breakdown, or safety event that results in excess emissions as soon as possible including information regarding upset, breakdown, or safety events.
- Submit a report for each excess emissions event to DEQ;
- Maintain records of each excess emissions event.

Permit Condition 3.15 - Sulfur Content Limits

The permittee shall not sell, distribute, use, or make available for use any of the following:

- Distillate fuel oil containing more than the following percentages of sulfur:
 - ASTM Grade 1 fuel oil, 0.3% by weight.
 - ASTM Grade 2 fuel oil, 0.5% by weight.
- Coal containing greater than 1.0% sulfur by weight.
- DEQ may approve an exemption from these fuel sulfur content requirements (IDAPA 58.01.01.725.01 725.04) if the permittee demonstrates that, through control measures or other means, SO2 emissions are equal to or less than those resulting from the combustion of fuels complying with these limitations.

[IDAPA 58.01.01.725, 4/11/15]

MRRR - (Permit Condition 3.16)

Maintain supplier verification of the sulfur content of the fuel supplied to the facility on an as-received basis.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

Permit Condition 3.17 - Open Burning

The permittee shall comply with the "Rules for Control of Open Burning," IDAPA 58.01.01.600-624. [IDAPA 58.01.01.600-624, 03/29/12]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.18 - Asbestos

The permittee shall comply with all applicable requirements of 40 CFR 61, Subpart M—"National Emission Standard for Asbestos."

[40 CFR 61, Subpart M]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.19 - Accidental Release Prevention

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR 68 no later than the latest of the following dates:

- Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130.
- The date on which a regulated substance is first present above a threshold quantity in a process. [40 CFR 68.10 (a);40 CFR 68.215(a)(2); IDAPA 58.01.01.322.11, 4/6/05; 40 CFR 68.215(a)(ii)]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.20 - Recycling and Emissions Reductions

The permittee shall comply with applicable standards for recycling and emissions reduction of refrigerants and their substitutes pursuant to 40 CFR 82, Subpart F, Recycling and Emissions Reduction.

[40 CFR 82, Subpart F]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.21 - NESHAP General Provisions

This facility is subject to two NESHAP's, 40 CFR 63 Subparts JJJJJJ, and ZZZZ, and is therefore is required to comply with 40 CFR 63, Subpart A – General Provisions, as applicable which include monitoring, recordkeeping and reporting requirements (MRRR).

[40 CFR 63, Subpart A]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.22- Monitoring and Recordkeeping

The permittee shall maintain sufficient records to assure compliance with all of the terms and conditions of this operating permit. Records of monitoring information shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Conditions 3.23 and 3.24 - Performance Testing

If performance testing is required, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree, or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests such testing not be performed on weekends or state holidays.

All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does

not satisfy the testing requirements. Therefore, prior to conducting any performance test, the permittee is encouraged to submit in writing to DEQ, at least 30 days in advance, the following for approval:

- The type of method to be used
- Any extenuating or unusual circumstances regarding the proposed test
- The proposed schedule for conducting and reporting the test

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

MRRR (Permit Conditions 3.25 and 3.26)

Compliance with Permit Conditions 3.23 and 3.24 is demonstrated by complying with the performance test reporting requirements (Permit Conditions 3.25 and 3.26).

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 5/1/94]

Permit Condition 3.27 - Reports and Certifications

This permit condition establishes generally applicable requirements for the submittal of reports, certifications, and notifications to DEQ and/or EPA as specified.

[IDAPA 58.01.01.322.08, 11, 5/1/94]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.28 - Incorporation of Federal Requirements by Reference

Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein.

[IDAPA 58.01.01.107, 4/7/11]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.29 - Facility-Wide Limits on Hazardous Air Pollutants Emissions

Facility-wide emission in any consecutive 12-calendar months shall not exceed 9.49 tons of any one hazardous air pollutant (HAP), and 24.49 tons for all HAPs combined.

[PTC No. P-2007.0107, 01/17/2011]

MRRR (Permit Conditions 4.3, 4.11, 5.4, 5.5, 5.6, 5.7, and 5.8)

Compliance with Permit Condition 3.29 is demonstrated by complying with Permit Conditions 4.3 (boiler fuel type requirement), 4.11 (boiler HAP's monitoring), 5.4 (kilns throughput limit), 5.5 (kilns temperature monitoring device requirement), 5.6 (kilns throughput limit by wood species), 5.7 (wood species HAP monitoring), and 5.8 (kilns temperature monitoring).

6.2 Hog Fuel Boiler

Permit Condition 4.1 - PM Grain Loading Standard

A person shall not discharge into the atmosphere from any fuel burning equipment in operation prior to October 1, 1979, or with a maximum rated input of less than ten (10) million BTUs per hour, particulate matter in excess of .200 gr/dscf corrected to 8% oxygen while combusting wood fuel.

[PTC No. P-2007.0107, 01/07/11]

MRRR (Permit Conditions 4.5, 4.7, 4.8, and 4.10)

Compliance with Permit Condition 4.1 is demonstrated by complying with the multiclone and wet scrubber operations requirements (Permit Condition 4.5), the PM₁₀ performance testing requirements (Permit Conditions 4.7 and 4.8), and the requirement to maintain a copy of the most recent performance test on-site (Permit Condition 4.10).

Permit Condition 4.2 – Emissions Limits

Emissions of PM₁₀ and CO shall not exceed the corresponding limits below in Table 4.3.

 Table 4.3
 HOG FUEL BOILER HOURLY AND ANNUAL EMISSIONS LIMITS

Source Description	PM ₁₀	1	СО
	lb/hr	T/yr	T/yr
Zurn hog fuel boiler	27	99.48	249

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Conditions 4.5, 4.7, 4.8, 4.9, and 4.10)

Compliance with Permit Condition 4.2 is demonstrated by complying with the multiclone and wet scrubber control device operations requirements (Permit Condition 4.5), the PM₁₀ performance testing requirements (Permit Conditions 4.7, 4.8, 4.9), and the requirement to maintain a copy of the most recent performance test on-site (Permit Condition 4.10). Once again, short-term PM₁₀ emissions are specifically limited to protect the 24-hour PM₁₀ NAAQS, while the annual CO limit is a PSD avoidance limit.

Permit Condition 4.3 – Fuel Type

The hog fuel boiler shall be fueled exclusively by wood products.

[PTC No. P-2007.0107, 01/17/11]

MRRR

No specific monitoring is required for this permit condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 4.4 – Steam Production and Steaming Rate Limits

On a 24-hour average, the operational steaming rate shall be maintained at or below the lesser of:

- 60,000 pounds of steam per hour,
- A maximum steaming rate in pounds per hour based on the average one-hour steaming rate attained during the most recent performance test conducted pursuant to this permit which demonstrated compliance with the PM₁₀ lb/hr emissions limit in Permit Condition 3.3.1 of PTC, calculated as follows:

Max. steaming rate = Avg. steaming rate during test x $\frac{27 lb/hr PM10}{Tested lb/hr PM10}$

• A maximum rate in pounds per hour based on the average one-hour steaming rate attained during the most recent performance test conducted pursuant to this permit which demonstrated compliance with the grain loading emissions limit in Permit Condition 3.3.2 of PTC, calculated as follows:

0.20 gr/dscf @ 8% Oxygen

Tested grain loading @ 8% Oxygen

Max. steaming rate = Avg. steaming rate during test x

The permittee may conduct additional performance tests during the permit term to revise the allowable steaming rate so long as the performance tests conform to all requirements of this permit. Whenever the steaming rate exceeds the allowable steaming rate, the permittee shall take corrective action within a reasonable time, but no longer than 24 hours from the discovery of the exceedance, to bring the steaming rate to the allowable rate or below. Deviations from this allowable operating rate shall not constitute a violation of this permit, unless the permittee fails to take corrective action or an emission standard prescribed in this permit is exceeded. DEQ may consider the frequency, duration, or magnitude of the deviations to determine if additional action is required.

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Conditions 4.7, 4.10, and 4.12)

Compliance with Permit Condition 4.4 is demonstrated by complying with the PM₁₀ performance testing requirement (Permit Conditions 4.7), the requirement to maintain a copy of the most recent performance test on-site (Permit Condition 4.10), and the requirement to monitor and calculate steam production daily, monthly, and annually (Permit Condition 4.12).

Permit Condition 4.5 - Multiclone and Wet Scrubber Control Devices

The permittee shall install and operate a multiclone in series with a wet scrubber and cyclone separator to control the PM_{10} and $PM_{2.5}$ emissions from the hog fuel boiler in accordance with CAM Requirements Table 4.3.

[40 CFR 64.7, PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Condition 4.5)

Compliance with Permit Condition 4.5 is demonstrated by complying with the following permit conditions:

• The multiclone and wet scrubber shall be in operation at all times during operation of the hog fuel boiler in accordance with CAM Requirements Table 4.3.

[40 CFR 64.7, PTC No. P-2007.0107, 01/17/11]

• The permittee shall install, operate, calibrate, and maintain a device to continuously monitor the ID fan outlet (scrubber inlet) pressure and the pressure drop across the multiclone during operation of the hog fuel boiler in accordance with CAM Requirements Table 4.3.

[40 CFR 64.7, PTC No. P-2007.0107, 01/17/11]

• The permittee shall install, operate, calibrate, and maintain a device to continuously measure the scrubbing media flow rate in gallons per minute in accordance with CAM Requirements Table 4.3.

[40 CFR 64.7, PTC No. P-2007.0107, 01/17/11

Permit Condition 4.6 –Performance Testing Operations

The permittee may conduct additional performance tests during the permit term to revise the allowable ID fan outlet (scrubber inlet) pressure or the minimum scrubbing media flow rate so long as the performance tests conform to all the requirements of this permit and the performance tests demonstrate compliance with the PM₁₀ pound per hour limit and the grain loading standard for the Zurn hog-fuel boiler while operating at the alternative operating parameters.

The performance test shall be conducted in accordance with the Test Methods and Procedures specified in the Rules (IDAPA 58.01.01.157) and in accordance with a DEQ-approved source test protocol.

- The permittee may request to operate outside of the operating parameters specified by the manufacturer during the performance test by submitting a written source test protocol to DEQ for approval and requesting to operate under alternative operating parameters for the duration of the test.
- The protocol shall describe how the operating parameters will be monitored during the performance test.
- Once the source test is completed the permittee may request in writing to operate in accordance with alternative operating parameters. The request shall include a source test report and justification for the alternative operating parameters.

[PTC No. P-2007.0107, 01/17/11

MRRR (Permit Conditions 4.7 and 4.8)

Compliance with Permit Condition 4.6 is demonstrated by complying with the performance testing requirements (Permit Conditions 4.7 and 4.8)

Permit Condition 4.7 – Performance Testing

The permittee shall conduct a performance test, at least once every five yearson the Zurn hog-fuel boiler to demonstrate compliance with the opacity limit, the PM₁₀ lb/hr emissions limit, and the grain loading standard.

The permittee shall test in accordance with IDAPA 58.01.01.157 and the conditions of this permit including the operating requirements for the Zurn hog-fuel boiler and General Provision 6. General Provision 6 includes notification requirements, testing procedures, and reporting requirements.

The source test shall be conducted under "worst case normal" conditions as required by IDAPA 58.01.01.157 and General Provision 6 and the source test report shall contain documentation that the test was conducted under these conditions.

During the next required performance test, at least one particulate matter test run shall be conducted with a scrubber pressure drop of less than or equal to 1.0 inch of water to demonstrate compliance with the opacity limit, the PM_{10} lb/hr emissions limit, and the grain loading standard at the low-end of the CAM indicator range. The boiler steaming rate shall be $\geq 20,000$ pounds of steam per hour during the test run(s) conducted to verify compliance at the low pressure drop.

The following information, at a minimum, shall be recorded during each performance test run and included in the performance test report:

- The steam production rate of the boiler shall be recorded in pounds per hour;
- The pressure drop across the multiclone and the ID fan outlet (scrubber inlet) pressure shall be recorded in inches of water at least once each 15 minutes during each test run;
- The scrubbing media flow rate shall be recorded in gallons per minute once each 15 minutes during each test run;
- Visible emissions from the boiler stack shall be observed and recorded during each test run, using the methods specified in IDAPA 58.01.01.625.

[IDAPA 58.01.01.322.06, 07, 08, 09, 4/5/00]

MRRR (Permit Conditions 4.7 and 4.10)

Compliance with Permit Condition 4.7 is demonstrated by complying with the performance testing requirements (Permit Condition 4.7) and the requirement to maintain a copy of the most recent performance test (Permit Condition 4.10).

Permit Condition 4.9 - CO Performance Test Requirement - NO LONGER APPLICABLE

After the initial perforance test, future testing shall be performed according to the following schedule. If the CO emission rate measure in the most recent test is less than 43 lb/hr, no further testing shall be



The required CO performance test was conducted on July 28, 2015. The CO emission rate measured during the test was 39.4 lb/hr. Because the measured CO emission rate is less than the CO emissions limit, no further testing for CO is required. It is for this reason that the CO performance testing requirement has been removed from the permit. So the number of the permit conditions was not disrupted, Permit Condition 4.9 remains in the permit as a place holder. It is identified as: **Permit Condition 4.9** – **RESERVED**

Permit Condition 4.10 – Maintain Copy of Source Tests

A copy of the most recent DEQ-approved source test for each pollutant tested and a copy of the corresponding DEQ review/approval letter which contains the permit number shall remain onsite at all times and shall be made available to Department representatives upon request.

[PTC No. P-2007.0107, 01/17/11]

MRRR

No specific monitoring is required for this permit condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 4.11 - HAPs Monitoring

The permittee shall calculate and record the emissions of methanol and total HAPs from the hog-fuel boiler on a monthly basis, in units of tons per month and tons for the most recent consecutive 12-calendar month period. These totals shall be combined with the methanol and total HAPs emissions from the kilns for the same period to demonstrate compliance with the facility-wide HAPs limits.

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Conditions 4.3, 5.4, 5.5, 5.6, 5.7 and 5.8)

Compliance with Permit Condition 4.11 is demonstrated by complying with the fuel type requirement (Permit Condition 4.3), the kiln throughput limit (Permit Condition 5.4), the kiln temperature monitoring requirement (Permit Condition 5.5), the throughput monitoring by wood species requirement (Permit Condition 5.6), the kiln HAP monitoring requirement (Permit Condition 5.7), and the kiln temperature monitoring requirement (Permit Condition 5.8).

Permit Condition 4.12 – Steam Production Monitoring for Boiler

The permittee shall monitor and record the daily steam production of the boiler to demonstrate compliance with steam production limit. Each month, the permittee shall sum the daily steam production for that month and for the previous 12 consecutive calendar-month period. Records shall be maintained on site and shall be made available to DEQ representatives upon request.

[PTC No. P-2007.0107, 01/17/11]

The permittee shall calculate the annual PM_{10} emissions as follows:

- Multiply the total monthly steam produced by the emission factor derived from the most recent DEQapproved source test. The emission factor shall be in pounds of PM₁₀ per pound of steam produced during the test.
- Sum the monthly PM₁₀ emissions derived above for each 12-consecutive calendar month period.

[PTC No. P-2007.0107, 01/17/11]

The permittee shall calculate the annual CO emissions as follows:

- Multiply the total monthly steam produced by the emission factor derived from the most recent DEQapproved source test. The emission factor shall be the pounds of CO per pound of steam produced during the test.
- Sum the monthly CO emissions derived above for each 12-consecutive calendar month period.

[PTC No. P-2007.0107, 01/17/11]

MRRR

No specific monitoring is required for this permit condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 4.13 – Zurn Industrial Boiler Tune Up and Energy Assessment

In accordance with 40 CFR 63.11201(b), you must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in Table 2 to this subpart satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement.

[40 CFR 63,11201(b)]

MRRR

Compliance with Permit Condition 4.13 is demonstrated by complying with Permit Conditions 4.14 through 4.21, inclusive, as follows:

- 4.14 In accordance with 40 CFR 63.11201(d), these standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in §63.11237, during which time you must comply only with Table 2 to this subpart.
- 4.15 In accordance with 40 CFR 63.11205(a), at all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
- 4.16 In accordance with 40 CFR 63.11214(b), you must conduct a performance tune-up according to §63.11223(b) and you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.

- 4.17 In accordance with 40 CFR 63.11223(a), you must conduct a performance tune-up according to paragraph (b) of this section and keep records as required in §63.11225(c) to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.
- 4.18 In accordance with 40 CFR 63.11223(c), boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up must conduct a tune-up of the boiler every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed boiler with an oxygen trim system, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.
- 4.19 In accordance with 40 CFR 63.11225(c), you must maintain the records specified in paragraphs (c)(1) through (7) of this section.
 - (1) As required in §63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.
 - (2) You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 and §63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section.
 - (i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
 - (iii) For each boiler required to conduct an energy assessment, you must keep a copy of the energy assessment report.
 - (4) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.
 - (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.
- 4.20 In accordance with 40 CFR 63.11225(d), your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years.

From Table 2 of Subpart JJJJJJ, the following requirements:

If your boiler is in this subcategory	You must meet the following
Existing biomass-fired boilers that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler biennially as specified in §63.11223.

If your boiler is in this subcategory	You must meet the following		
Existing coal-fired, biomass-fired, or oil-fired boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223.		
Existing coal-fired, biomass-fired, or oil-fired boilers (units with heat input capacity of 10 MMBtu/hr and greater), not including limited-use boilers	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. Energy assessor approval and qualification requirements are waived in instances where past or amended energy assessments are used to meet the energy assessment requirements. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items (1) to (4) appropriate for the on-site technical hours listed in §63.11237:		
	(1) A visual inspection of the boiler system,		
	(2) An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints,		
	(3) An inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator,		
	(4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,		
	(5) A list of major energy conservation measures that are within the facility's control,		
	(6) A list of the energy savings potential of the energy conservation measures identified, and		
	(7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.		

- 4.21 In accordance with 40 CFR 63.11225(g), if you have switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within subpart JJJJJJ, in the boiler becoming subject to subpart JJJJJJ, or in the boiler switching out of subpart JJJJJJ due to a change to 100 percent natural gas, or you have taken a permit limit that resulted in you being subject to subpart JJJJJJ, you must provide notice of the date upon which you switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify:
 - (1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.
 - (2) The date upon which the fuel switch, physical change, or permit limit occurred.

MRRR

Compliance with Permit Condition 4.22 is demonstrated by complying with 40 CFR 63, Subpart A, General Provisions, as applicable.

4.22 In accordance with 40 CFR 63.11226, In response to an action to enforce the standards set forth in §63.11201 you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

MRRR

Compliance with Permit Condition 4.23 is demonstrated by complying with Permit Conditions 4.24 and 4.25.

6.3 Drying Kilns

Permit Condition 5.1 – PM₁₀ and VOC Emissions Limits

The PM_{10} and VOC emissions from the Kilns 1 through 7 vents (combined) shall not exceed any corresponding emissions rate limits listed in Table 5.3.

Table 5.3 Drying Kiln Emissions Limits

	PM ₁₀	VOC
Source Description	T/yr	T/yr
Lumber Drying Kilns 1 through 7 combined emissions	3.94	110.3

[PTC No. P-2007.0107, 01/07/11]

MRRR (Permit Conditions 5.4, and 5.5)

Compliance with Permit Condition 5.1 is demonstrated by complying with the dried lumber throughput limit (Permit Condition 5.4), and the kiln temperature monitoring requirement (Permit Condition 5.5).

Permit Condition 5.2 - Process Weight

In accordance with IDAPA 58.01.01.702, the permittee shall not discharge into the atmosphere from any source operating prior to October 1, 1979, particulate matter in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

a. If PW is less than 17,000 pounds per hour,

$$E = 0.045 (PW)^{0.6}$$

b. If PW is equal to or greater than 17,000 pounds per hour,

$$E = 1.12 (PW)^{0.27}$$

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Condition 5.6)

Compliance with Permit Condition 5.2 is demonstrated by complying with the throughput of dried lumber on a per-species-basis monitoring requirement (Permit Condition 5.6).

Permit Condition 5.3 – Process Weight

In accordance with IDAPA 58.01.01.701, the permittee shall not discharge to the atmosphere from any source operating on or after October 1, 1979, particulate matter in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

a. If PW is less than 9,250 pounds per hour,

$$E = 0.045 (PW)^{0.6}$$

b. If PW is equal to or greater than 9,250 pounds per hour,

$$E = 1.10(PW)^{0.25}$$

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Condition 5.6)

Compliance with Permit Condition 5.3 is demonstrated by complying with the throughput of dried lumber on a per-species-basis monitoring requirement (Permit Condition 5.6).

Permit Condition 5.4 – Throughput Limits-Kilns 1 through 7 Combined

The throughput through Kilns 1 through 7 combined shall not exceed 157,585 thousand board feet (lumber scale) in any consecutive 12-calendar months.

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Condition 5.6)

Compliance with Permit Condition 5.4 is demonstrated by complying with the throughput of dried lumber on a per-species-basis monitoring requirement (Permit Condition 5.6).

Permit Condition 5.5 – Temperature Monitoring – Kilns 1 through 7

The permittee shall install, calibrate, maintain, and operate a device on each kiln to measure and record the kiln temperature.

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Condition 5.8)

Compliance with Permit Condition 5.5 is demonstrated by complying with the kiln temperature monitoring requirement (Permit Condition 5.8).

Permit Condition 5.6 – HAPs Monitoring

The permittee shall calculate and record the emissions of methanol and total HAPs from all of the lumber drying kilns on a monthly basis, in units of tons per month and tons for the most recent consecutive 12-calendar month period. These totals shall be combined with the methanol and total HAPs emissions from the hog-fuel boiler for the same period to demonstrate compliance with the facility-wide HAPs limits. HAPs emissions from the kilns shall be calculated using the equation given below and the emission factors listed in Table 5.4. If at any time during the drying time for each load, the temperature is equal to or greater than 200°F, the factor for > 200°F shall be used to calculate emissions for that load. Use of alternate emission factors requires prior DEQ approval.

$$HAP = \sum_{i=1}^{n} (X_i \times Y_i) \times (ton/2000 \ lbs)$$

Where:

HAP = Kiln Emissions of a specific HAP or total HAP in tons per month

n = Number of types of wood dried

X_i = Throughput of lumber of type i dried in all kilns in thousand board feet (MBF) per month

 Y_i = HAP emission factor for lumber of type i

Table 5.4 Kiln HAP Emission Factors

Table 0.4 Ithin mar Emission ractors					
Wood Species	Max. KilnTemp	Methanol (lb/MBF)	Total HAP (lb/Mbf)		
Douglas Fir	< 200 °F	0.038	0.097		
Douglas Fir	> 200 °F	0.057	0.116		
White Fir	< 200 °F	0.122	0.1824		
White Fir	> 200 °F	0.183	0.2434		
Ponderosa Pine	< 200 °F	0.065	0.1135		
Ponderosa Pine	> 200 °F	0.144	0.1889		
Lodgepole Pine	< 200 °F	0.055	0.0736		
Lodgepole Pine	> 200 °F	0.060	0.0786		

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Conditions 5.4, 5.5, 5.6 and 5.8)

Compliance with Permit Condition 5.7 is demonstrated by complying with the combined kiln throughput limit (Permit Condition 5.4), the kiln temperature monitoring device requirement (Permit Condition 5.5), the kiln throughput monitoring requirement (Permit Condition 5.6), and the kiln temperature monitoring requirement (Permit Condition 5.8).

6.4 Woodworking Equipment

Permit Condition 6.1 - Process Weight

In accordance with IDAPA 58.01.01.702, the permittee shall not discharge into the atmosphere from any source operating prior to October 1, 1979, particulate matter in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

a. If PW is less than 17,000 pounds per hour,

$$E = 0.045 (PW)^{0.6}$$

b. If PW is equal to or greater than 17,000 pounds per hour,

$$E = 1.12(PW)^{0.27}$$

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Conditions 6.3 and 6.4)

Compliance with Permit Condition 6.1 is demonstrated by complying with the operation of cyclones and baghouse/filter systems requirement (Permit Condition 6.3), and the cyclone and baghouse/filter systems procedures requirement (Permit Condition 6.4).

Permit Condition 6.2 - Process Weight

In accordance with IDAPA 58.01.01.701, the permittee shall not discharge to the atmosphere from any source operating on or after October 1, 1979, particulate matter in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour:

a. If PW is less than 9,250 pounds per hour,

$$E = 0.045 (PW)^{0.6}$$

b. If PW is equal to or greater than 9,250 pounds per hour,

$$E = 1.10 (PW)^{0.25}$$

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Conditions 6.3 and 6.4)

Compliance with Permit Condition 6.2 is demonstrated by complying with the operation of cyclones and baghouse/filter systems requirement (Permit Condition 6.3), and the cyclone and baghouse/filter systems procedures requirement (Permit Condition 6.4).

Permit Condition 6.3 – Operation of cyclones and baghouse/filter systems

The permittee shall install and operate cyclones and baghouse/filter system(s) to control emissions from woodworking equipment at this facility.

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Condition 6.5)

Compliance with Permit Condition 6.3 is demonstrated by complying with the Cyclone and Baghouse/Filter System Document requirement (Permit Condition 6.5).

Permit Condition 6.4 – Cyclone and Baghouse/Filter System Procedures

The permittee shall have developed a Cyclone and Baghouse/Filter System Procedures document regarding the inspection and operation of the cyclones and baghouses/filter system(s) which controls the PM and PM₁₀ emissions from woodworking equipment at this facility. The document shall describe the procedures that will be followed to comply with good working order and efficient operating practices, and shall contain, at a minimum, requirements for monthly inspections of the cyclones and baghouse(s). The inspection procedures shall include, but not be limited to:

• A visible emissions observation while operating;

- If visible emissions are present the opacity of the visible emissions shall be determined in accordance with procedures contained in IDAPA 58.01.01.625;
- Checking the bags or cartridges for structural integrity; and
- Checking to assure that bags or cartridges are appropriately secured in place.

The Baghouse/Filter System Procedures document shall also include a schedule and procedures for corrective action that will be taken if:

- Visible emissions are determined to be 10% opacity or greater;
- · Bags or cartridges are ruptured; or
- Bags or cartridges are not appropriately secured in place.

The permittee shall maintain records of the results of the baghouse/filter system inspection in accordance with monitoring and recordkeeping permit condition. The records shall include a description of any corrective action that was taken, whether visible emissions were present, and if visible emissions were present the results of visible emission observation as determined by procedures contained in IDAPA 58.01.01.625.

Any changes to the Cyclone and Baghouse/Filter System Procedures document shall be submitted within 15 days of the change. The Cyclone and Baghouse/Filter System Procedures document shall also remain on site at all times and shall be made available to DEQ representatives upon request.

[PTC No. P-2007.0107, 01/17/11]

MRRR (Permit Condition 6.5)

Compliance with Permit Condition 6.4 is demonstrated by complying with the Cyclone and Baghouse/Filter System Document requirement (Permit Condition 6.5).

6.5 Compression Ignition Emergency Internal Combustion Engine

Permit Condition 7.1 – Comply with Subpart ZZZZ as applicable

The permittee shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ and all applicable general provisions of 40 CFR 63 Subpart A.

Subpart ZZZZ applies to the existing stationary Reciprocating Internal Combustion Engine (RICE) located at area source of HAP emissions. Subpart ZZZZ applies to the existing emergency compression ignition engine with a rated capacity of 270 bhp. Bennett Lumber Products maintains a John Deere, 6081AF001, 270 bhp compression ignition engine onsite for emergency purposes.

MRRR

Compliance with Permit Condition 7.1 is demonstrated by complying with Subpart ZZZZ as applicable (Permit Conditions 7.2 through 7.10).

6.6 General Provisions

Unless expressly stated, there are no MRRR for the general provisions.

General Compliance, Duty to Comply

The permittee must comply with the terms and conditions of the permit.

[IDAPA 58.01.01.322.15.a, 5/1/94; 40 CFR 70.6(a)(6)(i)]

General Compliance, Need to Halt or Reduce Activity Not a Defense

The permittee cannot use the fact that it would have been necessary to halt or reduce an activity as a defense in an enforcement action.

[IDAPA 58.01.01.322.15.b, 5/1/94; 40 CFR 70.6(a)(6)(ii)]

General Compliance, Duty to Supplement or Correct Application

The permittee must promptly submit such supplementary facts or corrected information upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application. The permittee must also provide information as necessary to address any new requirements that become applicable after the date a complete application has been filed but prior to the release of a draft permit.

[IDAPA 58.01.01.315.01, 5/1/94; 40 CFR 70.5(b)]

Reopening, Additional Requirements, Material Mistakes, Etc.

This term lists the instances when the permit must be reopened and revised, including times when additional requirements become applicable, when the permit contains mistakes, or when revision or revocation is necessary to assure compliance with applicable requirements.

[IDAPA 58.01.01.322.15.c, 5/1/94; IDAPA 58.01.01.386, 3/19/99; 40 CFR 70.7(f)(1), (2); 40 CFR 70.6(a)(6)(iii)]

Reopening, Permitting Actions

This term discusses modification, revocation, reopening, and/or reissuance of the permit for cause. If the permittee files a request to modify, revoke, reissue, or terminate the permit, the request does not stay any permit condition, nor does notification of planned changes or anticipated noncompliance.

[IDAPA 58.01.01.322.15.d, 5/1/94; 40 CFR 70.6(a)(6)(iii)]

Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

[IDAPA 58.01.01.322.15.e, 5/1/94; 40 CFR 70.6(a)(6)(iv)]

Information Requests

The permittee must furnish, within a reasonable time to DEQ, any information, including records required by the permit, that is requested in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.

[Idaho Code §39-108; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.f, 4/5/00; 40 CFR 70.6(a)(6)(v)]

Information Requests, Confidential Business Information

Upon request, the permittee must furnish to DEQ copies of records required to be kept by this permit. For information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality in accordance with Idaho Code §9-342A and applicable implementing regulations including IDAPA 58.01.01.128.

[IDAPA 58.01.01.322.15.g, 5/1/94; IDAPA 58.01.01.128, 4/5/00; 40 CFR 70.6(a)(6)(v)]

Severability

If any provision of the permit is held to be invalid, all unaffected provisions of the permit will remain in effect and enforceable.

[IDAPA 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]

Changes Requiring Permit Revision or Notice

The permittee may not commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining all necessary permits to construct or an approval under IDAPA 58.01.01.213, or complying with IDAPA 58.01.01.220 through 223. The permittee must comply with IDAPA 58.01.01.380 through 386 as applicable.

[IDAPA 58.01.01.200-223, 4/2/08; IDAPA 58.01.01.322.15.i, 3/19/99; IDAPA 58.01.01.380-386, 7/1/02; 40 CFR 70.4(b)(12), (14), (15), and 70.7(d), (e)]

Changes that are not addressed or prohibited by the Tier I operating permit require a Tier I operating permit revision if such changes are subject to any requirement under Title IV of the CAA, 42 U.S.C. Section 7651 through 7651c, or are modifications under Title I of the CAA, 42 U.S.C. Section 7401 through 7515. Administrative amendments (IDAPA 58.01.01.381), minor permit modifications (IDAPA 58.01.01.383), and significant permit modifications (IDAPA 58.01.01.382) require a revision to the Tier I operating permit. IDAPA 58.01.01.502(b)(10) changes are authorized in accordance with IDAPA 58.01.01.384. Off permit changes and required notice are authorized in accordance with IDAPA 58.01.01.385.

[IDAPA 58.01.01.381-385, 7/1/02; IDAPA 58.01.01.209.05, 4/11/06; 40 CFR 70.4(b)(14) and (15)]

Federal and State Enforceability

All permit conditions are federally enforceable unless specified in the permit as a state or local only requirement. State and local only requirements are not required under the CAA and are not enforceable by EPA or by citizens.

[IDAPA 58.01.01.322.15.j, 5/1/94; IDAPA 58.01.01.322.15.k, 3/23/98; Idaho Code §39-108; 40 CFR 70.6(b)(1), (2)]

Inspection and Entry

Upon presentation of credentials, the facility shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee's premises where a Tier I source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108; IDAPA 58.01.01.322.15.l, 5/1/94; 40 CFR 70.6(c)(2)]

New Applicable Requirements

The permittee must continue to comply with all applicable requirements and must comply with new requirements on a timely basis.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.10.a.ii, 5/1/94; 40 CFR 70.6(c)(3) citing 70.5(c)(8)]

Fees

The owner or operator of a Tier I source shall pay annual registration fees to DEQ in accordance with IDAPA 58.01.01.387 through IDAPA 58.01.01.397.

[IDAPA 58.01.01.387, 4/2/03; 40 CFR 70.6(a)(7)]

Certification

All documents submitted to DEQ shall be certified in accordance with IDAPA 58.01.01.123 and comply with IDAPA 58.01.01.124.

[IDAPA 58.01.01.322.15.0, 5/1/94; 40 CFR 70.6(a)(3)(iii)(A); 40 CFR 70.5(d)]

Renewal

The permittee shall submit an application to DEQ for a renewal of this permit at least six months before, but no earlier than 18 months before, the expiration date of this operating permit. To ensure that the term of the operating permit does not expire before the permit is renewed, the owner or operator is encouraged to submit a renewal application nine months prior to the date of expiration.

[IDAPA 58.01.01.313.03, 4/5/00; 40 CFR 70.5(a)(1)(iii)]

If a timely and complete application for a Tier I operating permit renewal is submitted, but DEQ fails to issue or deny the renewal permit before the end of the term of this permit, then all the terms and conditions of this permit including any permit shield that may have been granted pursuant to IDAPA 58.01.01.325 shall remain in effect until the renewal permit has been issued or denied.

[IDAPA 58.01.01.322.15.p, 5/1/94; 40 CFR 70.7(b)]

Permit Shield

Compliance with the terms and conditions of the Tier I operating permit, including those applicable to all alternative operating scenarios and trading scenarios, shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- Such applicable requirements are included and are specifically identified in the Tier I operating permit; or
 - DEQ has determined that other requirements specifically identified are not applicable and all of the criteria set forth in IDAPA 58.01.01.325.01(b) have been met.
- The permit shield shall apply to permit revisions made in accordance with IDAPA 58.01.01.381.04 (administrative amendments incorporating the terms of a permit to construct), IDAPA 58.01.01.382.04 (significant modifications), and IDAPA 58.01.01.384.03 (trading under an emissions cap).
- Nothing in this permit shall alter or affect the following:
 - Any administrative authority or judicial remedy available to prevent or terminate emergencies or imminent and substantial dangers;
 - The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - The applicable requirements of the acid rain program, consistent with 42 U.S.C. Section 7651(g)(a); and
 - The ability of EPA to obtain information from a source pursuant to Section 114 of the CAA; or the ability of DEQ to obtain information from a source pursuant to Idaho Code §39-108 and IDAPA 58.01.01.122.

[Idaho Code §39-108 and 112; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.m, 325.01, 5/1/94; IDAPA 58.01.01.325.02, 3/19/99; IDAPA 58.01.01.381.04, 382.04, 383.05, 384.03, 385.03, 3/19/99; 40 CFR 70.6(f)]

Compliance Schedule and Progress Reports

- For each applicable requirement for which the source is not in compliance, the permittee shall comply with the compliance schedule incorporated in this permit.
- For each applicable requirement that will become effective during the term of this permit and that provides a detailed compliance schedule, the permittee shall comply with such requirements in accordance with the detailed schedule.
- For each applicable requirement that will become effective during the term of this permit that does not contain a more detailed schedule, the permittee shall meet such requirements on a timely basis.
- For each applicable requirement with which the permittee is in compliance, the permittee shall continue to comply with such requirements.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.9, 5/1/94; IDAPA 58.01.01.314.10, 4/5/00; 40 CFR 70.6(c)(3) and (4)]

Periodic Compliance Certification

The permittee shall submit compliance certifications during the term of the permit for each emissions unit to DEQ and the EPA as specified.

- Compliance certifications for all emissions units shall be submitted annually unless otherwise specified;
- All original compliance certifications shall be submitted to DEQ and a copy of all compliance certifications shall be submitted to the EPA.

[IDAPA 58.01.01.322.11, 4/6/05; 40 CFR 70.6(c)(5)(iii) as amended, 62 Fed. Reg. 54900, 54946 (10/22/97); 40 CFR 70.6(c)(5)(iv)]

False Statements

The permittee may not make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

No Tampering

The permittee may not render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Semiannual Monitoring Reports.

In addition to all applicable reporting requirements identified in this permit, the permittee shall submit reports of any required monitoring at least every six months as specified.

[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.322.08.c, 4/5/00; 40 CFR 70.6(a)(3)(iii)]

Reporting Deviations and Excess Emissions

Each and every applicable requirement, including MRRR, is subject to prompt deviation reporting. Deviations due to excess emissions must be reported in accordance Sections 130-136. All instances of deviation from Tier I operating permit requirements must be included in the deviation reports. The reports must describe the probable cause of the deviation and any corrective action or preventative measures taken. Deviation reports must be submitted at least every six months unless the permit specifies a different time period as required by IDAPA 58.01.01.322.08.c. Examples of deviations include, but are not limited to, the following:

- Any situation in which an emissions unit fails to meet a permit term or condition
- Emission control device does not meet a required operating condition
- Observations or collected data that demonstrate noncompliance with an emissions standard
- Failure to comply with a permit term that requires a report

[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.135, 4/11/06; 40 CFR 70.6(a)(3)(iii)]

Permit Revision Not Required, Emissions Trading

No permit revision will be required, under any approved, economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in the permit.

[IDAPA 58.01.01.322.05.b, 4/5/00; 40 CFR 70.6(a)(8)]

Emergency

In accordance with IDAPA 58.01.01.332, an "emergency" as defined in IDAPA 58.01.01.008, constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitation if the conditions of IDAPA 58.01.01.332.02 are met.

[IDAPA 58.01.01.332.01, 4/5/00; 40 CFR 70.6(g)]

7. REGULATORY REVIEW

7.1 Attainment Designation (40 CFR 81.313)

The facility is located in Latah County which is designated as attainment or unclassifiable for PM_{10} , $PM_{2.5}$, CO, NO_2 , SOx, and Ozone. Reference 40 CFR 81.313.

7.2 Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

The BLP facility emits or has the potential to emit PM_{10} , CO and VOC's in amounts greater than the applicable Title V threshold of 100 T/yr. Therefore, BLP is classified as a Title V facility.

7.3 PSD Classification (40 CFR 52.21)

The PSD rules found at 40 CFR 52.21 and IDAPA 58.01.01.205 do not apply to BLP because the regulated pollutants in this section, after controls, do not equal or exceed the PSD major stationary source threshold of 250 tons per year (40 CFR 52.21(b)(1)(i)(b)).

7.4 NSPS Applicability (40 CFR 60)

BLP is not subject to any of the source categories under regulation 40 CFR 60.

7.5 NESHAP Applicability (40 CFR 61)

BLP is not subject to any of the source categories under regulation 40 CFR 61.

7.6 MACT Applicability (40 CFR 63)

- BLP is subject to 40 CFR 63, Subpart JJJJJJ National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources for the hog fuel boiler; and
 - The narrative under Subpart JJJJJJ is the initial applicability determination for this facility.
- BLP is subject to 40 CFR 63, Subpart ZZZZ National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines for the emergency fire pump engine
 - The applicability determination for Subpart ZZZZ was done previously for T1 permit T1-050201 Project 60630, issued January 17, 2011. No changes were made to that analysis for this project.

Note: The facility's applicability to each subsection of Subpart JJJJJJ as provided by the applicant is provided in RED ITALICISED TEXT.

40 CFR 63, Subpart JJJJJJ-National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

§63.11193 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler as defined in §63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195.

The Zurn boiler is an industrial boiler, as defined In 40 CFR 63.11237, and is located at an area source of HAPs, as defined in §63.2, except as specified in §63.11195.

§63.11194 What is the affected source of this subpart?

(a) This subpart applies to each new, reconstructed, or existing affected source as defined in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers within a subcategory, as listed in §63.11200 and defined in §63.11237, located at an area source.

The boiler is an affected source and is an existing source.

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler within a subcategory, as listed in §63.11200 and as defined in §63.11237, located at an area source.

The boiler is not a new or reconstructed industrial, commercial, or institutional boiler within a subcategory, as listed in §63.11200 and as defined in §63.11237, located at an area source.

(b) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before June 4, 2010.

The boiler is an affected source and is an existing source constructed in 1978.

- (c) An affected source is a new source if you commenced construction of the affected source after June 4, 2010, and the boiler meets the applicability criteria at the time you commence construction.

 The boiler is not a new source.
 - (d) An affected source is a reconstructed source if the boiler meets the reconstruction criteria as defined in §63.2, you commenced reconstruction after June 4, 2010, and the boiler meets the applicability criteria at the time you commence reconstruction.

This does not apply. The boiler is an affected source and is an existing source constructed in 1978.

(e) An existing dual-fuel fired boiler meeting the definition of gas-fired boiler, as defined in §63.11237, that meets the applicability requirements of this subpart after June 4, 2010 due to a fuel switch from gaseous fuel to solid fossil fuel, biomass, or liquid fuel is considered to be an existing source under this subpart as long as the boiler was designed to accommodate the alternate fuel.

This does not apply. The boiler is a biomass-fired boiler.

(f) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or part 71 as a result of this subpart. You may, however, be required to obtain a title V permit due to another reason or reasons. See 40 CFR 70.3(a) and (b) or 71.3(a) and (b). Notwithstanding the exemption from title V permitting for area sources under this subpart, you must continue to comply with the provisions of this subpart.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

The permittee is required to obtain a Part 70 permit for other reasons.

§63.11195 Are any boilers not subject to this subpart?

The types of boilers listed in paragraphs (a) through (k) of this section are not subject to this subpart and to any requirements in this subpart.

- (a) Any boiler specifically listed as, or included in the definition of, an affected source in another standard(s) under this part.
- (b) Any boiler specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act.
- (c) A boiler required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by subpart EEE of this part (e.g., hazardous waste boilers), unless such units do not combust hazardous waste and combust comparable fuels.
- (d) A boiler that is used specifically for research and development. This exemption does not include boilers that solely or primarily provide steam (or heat) to a process or for heating at a research and development facility. This exemption does not prohibit the use of the steam (or heat) generated from

the boiler during research and development, however, the boiler must be concurrently and primarily engaged in research and development for the exemption to apply.

- (e) A gas-fired boiler as defined in this subpart.
- (f) A hot water heater as defined in this subpart.
- (g) Any boiler that is used as a control device to comply with another subpart of this part, or part 60, part 61, or part 65 of this chapter provided that at least 50 percent of the average annual heat input during any 3 consecutive calendar years to the boiler is provided by regulated gas streams that are subject to another standard.
- (h) Temporary boilers as defined in this subpart.
- (i) Residential boilers as defined in this subpart.
- (j) Electric boilers as defined in this subpart.
- (k) An electric utility steam generating unit (EGU) covered by subpart UUUUU of this part.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

The boiler does not meet any of the exemption requirements of 40 CFR 63.11195(a) through (k).

§63.11196 What are my compliance dates?

- (a) If you own or operate an existing affected boiler, you must achieve compliance with the applicable provisions in this subpart as specified in paragraphs (a)(1) through (3) of this section.
 - (1) If the existing affected boiler is subject to a work practice or management practice standard of a tune-up, you must achieve compliance with the work practice or management practice standard no later than March 21, 2014.

This requirement applies because the boiler is an affected boiler.

(2) If the existing affected boiler is subject to emission limits, you must achieve compliance with the emission limits no later than March 21, 2014.

This requirement does not apply. The permittee is not in a subcategory provided in table 1 of the subpart.

(3) If the existing affected boiler is subject to the energy assessment requirement, you must achieve compliance with the energy assessment requirement no later than March 21, 2014.

The permittee has an existing boiler that is required to complete a tune-up and a one-time energy assessment. NOTE: The initial boiler tune-up and one-time energy assessment was conducted on February 27, 2014.

(b) If you start up a new affected source on or before May 20, 2011, you must achieve compliance with the provisions of this subpart no later than May 20, 2011.

This requirement does not apply. The permittee has an existing boiler.

(c) If you start up a new affected source after May 20, 2011, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

This requirement does not apply. The permittee has an existing boiler.

(d) If you own or operate an industrial, commercial, or institutional boiler and would be subject to this subpart except for the exemption in §63.11195(b) for commercial and industrial solid waste incineration units covered by 40 CFR part 60, subpart CCCC or subpart DDDD, and you cease combusting solid waste, you must be in compliance with this subpart on the effective date of the waste to fuel switch as specified in §60.2145(a)(2) and (3) of subpart CCCC or §60.2710(a)(2) and (3) of subpart DDDD.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

This requirement does not apply. The permittee does not own or operate an Industrial, commercial, or institutional boiler and would be subject to this subpart except for the exemption in §63.11195(b) for commercial and industrial solid waste Incineration units covered by 40 CFR part 60, subpart CCCC or subpart DDDD.

Emission Limits, Work Practice Standards, Emission Reduction Measures, and Management Practices

§63.11200 What are the subcategories of boilers?

The subcategories of boilers, as defined in §63.11237 are:

- (a) Coal.
- (b) Biomass.
- (c) Oil.
- (d) Seasonal boilers.
- (e) Oil-fired boilers with heat input capacity of equal to or less than 5 million British thermal units (Btu) per hour.
- (f) Boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up.
- (g) Limited-use boilers.

[78 FR 7506, Feb. 1, 2013]

40 CFR 63.11200(b) applies because the boiler is biomass-fired. 40 CFR 63.11200(a) and (f), and (c) through (e) and (g) do not apply.

§63.11201 What standards must I meet?

(a) You must comply with each emission limit specified in Table 1 to this subpart that applies to your boiler.

40 CFR 63.11201(a) does not apply. The permittee is not in a subcategory provided in table 1 of the subpart.

(b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in Table 2 to this subpart satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement.

40 CFR 63.11201(b) applies because the boiler is biomass-fired. The permittee is subject to the following conditions of Table 2: 14, 16.

(c) You must comply with each operating limit specified in Table 3 to this subpart that applies to your boiler.

40 CFR 63.11201(c) does not apply because the boiler is not subject to an emission limit in accordance with 40 CFR 63.11201 (a).

(d) These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in §63.11237, during which time you must comply only with Table 2 to this subpart.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

40 CFR 63.11201(d) generally applies.

General Compliance Requirements

§63.11205 What are my general requirements for complying with this subpart?

(a) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

40 CFR 63.11205(a) applies. When operating the boiler, it must be operated in a manner that is consistent with reducing emissions and compliance with appropriate limitations applies at all times.

(b) You must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or a continuous monitoring system (CMS), including a continuous emission monitoring system (CEMS), a continuous opacity monitoring system (COMS), or a continuous parameter monitoring system (CPMS), where applicable. You may demonstrate compliance with the applicable mercury emission limit using fuel analysis if the emission rate calculated according to §63.11211(c) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using stack testing.

40 CFR 63.11205(b) does not apply. The boiler is not subject to an applicable emission limit.

- (c) If you demonstrate compliance with any applicable emission limit through performance stack testing and subsequent compliance with operating limits (including the use of CPMS), with a CEMS, or with a COMS, you must develop a site-specific monitoring plan according to the requirements in paragraphs (c)(1) through (3) of this section for the use of any CEMS, COMS, or CPMS. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).
 - (1) For each CMS required in this section (including CEMS, COMS, or CPMS), you must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan that addresses paragraphs (c)(1)(i) through (vi) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS. This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing CEMS or COMS operated according to the performance

- specifications under appendix B to part 60 of this chapter and that meet the requirements of §63.11224.
- (i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
- (ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
- (iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
- (iv) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);
- (v) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
- (vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 8 to this subpart), (e)(1), and (e)(2)(i).
- (2) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.
- (3) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

40 CFR 63.11205(c) does not apply. The boiler is not subject to an applicable emission limit.

Initial Compliance Requirements

§63.11210 What are my initial compliance requirements and by what date must I conduct them?

- (a) You must demonstrate initial compliance with each emission limit specified in Table 1 to this subpart that applies to you by either conducting performance (stack) tests, as applicable, according to §63.11212 and Table 4 to this subpart or, for mercury, conducting fuel analyses, as applicable, according to §63.11213 and Table 5 to this subpart.
- 40 CFR 63.11210(a) does not apply. The boiler is not subject to an applicable emission limit.
 - (b) For existing affected boilers that have applicable emission limits, you must demonstrate initial compliance with the applicable emission limits no later than 180 days after the compliance date that is specified in §63.11196 and according to the applicable provisions in §63.7(a)(2), except as provided in paragraph (j) of this section.
- 40 CFR 63.11210(b) does not apply. The Boiler is not subject to an applicable emission limit.
 - (c) For existing affected boilers that have applicable work practice standards, management practices, or emission reduction measures, you must demonstrate initial compliance no later than the compliance date that is specified in §63.11196 and according to the applicable provisions in §63.7(a)(2), except as provided in paragraph (j) of this section.
- 40 CFR 63.11210(c) does apply. In accordance with 40 CFR 63.11196, the Boiler is subject to an applicable work practice standard and must achieve compliance no later than March 21, 2014.

- (d) For new or reconstructed affected boilers that have applicable emission limits, you must demonstrate initial compliance with the applicable emission limits no later than 180 days after March 21, 2011 or within 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).
- 40 CFR 63.11210(d) does not apply. The Boiler is not new or reconstructed affected boiler.
 - (e) For new or reconstructed oil-fired boilers that combust only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM emission limit under this subpart and that do not use a post-combustion technology (except a wet scrubber) to reduce particulate matter (PM) or sulfur dioxide emissions, you are not subject to the PM emission limit in Table 1 of this subpart providing you monitor and record on a monthly basis the type of fuel combusted. If you intend to burn a new type of fuel or fuel mixture that does not meet the requirements of this paragraph, you must conduct a performance test within 60 days of burning the new fuel.
- 40 CFR 63.11210(e) does not apply. The Boiler is not a new or reconstructed oil-fired boiler.
 - (f) For new or reconstructed affected boilers that have applicable work practice standards or management practices, you are not required to complete an initial performance tune-up, but you are required to complete the applicable biennial or 5-year tune-up as specified in §63.11223 no later than 25 months or 61 months, respectively, after the initial startup of the new or reconstructed affected source.
- 40 CFR 63.11210(f) does not apply. The Boiler is not a new or reconstructed affected boiler.
 - (g) For affected boilers that ceased burning solid waste consistent with §63.11196(d) and for which your initial compliance date has passed, you must demonstrate compliance within 60 days of the effective date of the waste-to-fuel switch as specified in §60.2145(a)(2) and (3) of subpart CCCC or §60.2710(a)(2) and (3) of subpart DDDD. If you have not conducted your compliance demonstration for this subpart within the previous 12 months, you must complete all compliance demonstrations for this subpart before you commence or recommence combustion of solid waste.
- 40 CFR 63.11210(g) does not apply. The Boiler is not an affected boiler that ceased burning solid waste consistent with 40 CFR 63.11196(g).
 - (h) For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within subpart JJJJJJ or the boiler becoming subject to subpart JJJJJJ, you must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to §63.11225(g).
- 40 CFR 63.11210(h) does not apply. If a fuel switch is proposed, notification will be provided and compliance demonstrated within 180 days of the effective date of the fuel switch.
 - (i) For boilers located at existing major sources of HAP that limit their potential to emit (e.g., make a physical change or take a permit limit) such that the existing major source becomes an area source, you must comply with the applicable provisions as specified in paragraphs (i)(1) through (3) of this section.
 - (1) Any such existing boiler at the existing source must demonstrate compliance with subpart JJJJJJ within 180 days of the later of March 21, 2014 or upon the existing major source commencing operation as an area source.
 - (2) Any new or reconstructed boiler at the existing source must demonstrate compliance with subpart JJJJJJ within 180 days of the later of March 21, 2011 or startup.
 - (3) Notification of such changes must be submitted according to §63.11225(g).

40 CFR 63.11210(i) does apply. The Boiler is an existing boiler located at a minor source of HAP emissions

- (j) For existing affected boilers that have not operated between the effective date of the rule and the compliance date that is specified for your source in §63.11196, you must comply with the applicable provisions as specified in paragraphs (j)(1) through (3) of this section.
- (1) You must complete the initial compliance demonstration, if subject to the emission limits in Table 1 to this subpart, as specified in paragraphs (a) and (b) of this section, no later than 180 days after the re-start of the affected boiler and according to the applicable provisions in §63.7(a)(2).
- (2) You must complete the initial performance tune-up, if subject to the tune-up requirements in §63.11223, by following the procedures described in §63.11223(b) no later than 30 days after the re-start of the affected boiler.
- (3) You must complete the one-time energy assessment, if subject to the energy assessment requirements specified in Table 2 to this subpart, no later than the compliance date specified in §63.11196.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7507, Feb. 1, 2013]

40 CFR 63.11210(h) does not apply. The Boiler has operated between the effective date of the rule and the compliance date.

§63.11211 How do I demonstrate initial compliance with the emission limits?

(a) For affected boilers that demonstrate compliance with any of the emission limits of this subpart through performance (stack) testing, your initial compliance requirements include conducting performance tests according to §63.11212 and Table 4 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler according to §63.11213 and Table 5 to this subpart, establishing operating limits according to §63.11222, Table 6 to this subpart and paragraph (b) of this section, as applicable, and conducting CMS performance evaluations according to §63.11224. For affected boilers that burn a single type of fuel, you are exempted from the compliance requirements of conducting a fuel analysis for each type of fuel burned in your boiler. For purposes of this subpart, boilers that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as affected boilers that burn a single type of fuel, and the supplemental fuel is not subject to the fuel analysis requirements under §63.11213 and Table 5 to this subpart.

40 CFR 63.11211(a) does not apply. The Boiler is not subject to an applicable emission limit.

- (b) You must establish parameter operating limits according to paragraphs (b)(1) through (4) of this section.
 - (1) For a wet scrubber, you must establish the minimum scrubber liquid flow rate and minimum scrubber pressure drop as defined in §63.11237, as your operating limits during the three-run performance stack test. If you use a wet scrubber and you conduct separate performance stack tests for PM and mercury emissions, you must establish one set of minimum scrubber liquid flow rate and pressure drop operating limits. If you conduct multiple performance stack tests, you must set the minimum scrubber liquid flow rate and pressure drop operating limits at the highest minimum values established during the performance stack tests.

40 CFR 63.11211(b)(1) does not apply. A performance test is not required to demonstrate compliance with an emissions limit required by this subpart.

(2) For an electrostatic precipitator operated with a wet scrubber, you must establish the minimum total secondary electric power (secondary voltage and secondary current), as defined in §63.11237, as your operating limits during the three-run performance stack test.

40 CFR 63.11211(b)(2) does not apply. The permittee does not operate an electrostatic precipitator operated with a wet scrubber.

(3) For activated carbon injection, you must establish the minimum activated carbon injection rate, as defined in §63.11237, as your operating limit during the three-run performance stack test.

40 CFR 63.11211(b)(3) does not apply. The permittee does not operate add-on control using activated carbon injection.

(4) The operating limit for boilers with fabric filters that demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.11224, and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

40 CFR 63.11211(b)(4) does not apply. The permittee does not operate a boiler with fabric filter control.

- (c) If you elect to demonstrate compliance with an applicable mercury emission limit through fuel analysis, you must conduct fuel analyses according to §63.11213 and Table 5 to this subpart and follow the procedures in paragraphs (c)(1) through (3) of this section.
 - (1) If you burn more than one fuel type, you must determine the fuel type, or mixture, you could burn in your boiler that would result in the maximum emission rates of mercury.
 - (2) You must determine the 90th percentile confidence level fuel mercury concentration of the composite samples analyzed for each fuel type using Equation 1 of this section.

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P_{90} = mean + (SD * t) (Eq. 1)
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Where:

P90 = 90th percentile confidence level mercury concentration, in pounds per million Btu.

mean = Arithmetic average of the fuel mercury concentration in the fuel samples analyzed according to §63.11213, in units of pounds per million Btu.

- SD = Standard deviation of the mercury concentration in the fuel samples analyzed according to §63.11213, in units of pounds per million Btu.
- t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.
 - (3) To demonstrate compliance with the applicable mercury emission limit, the emission rate that you calculate for your boiler using Equation 1 of this section must be less than the applicable mercury emission limit.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7508, Feb. 1, 2013]

40 CFR 63.11211(c)(1) through (3) do not apply. The Boiler is not subject to an applicable mercury emission limit.

§63.11212 What stack tests and procedures must I use for the performance tests?

- (a) You must conduct all performance tests according to §63.7(c), (d), (f), and (h). You must also develop a site-specific test plan according to the requirements in §63.7(c).
- (b) You must conduct each stack test according to the requirements in Table 4 to this subpart. Boilers that use a CEMS for carbon monoxide (CO) are exempt from the initial CO performance testing in Table 4 to this subpart and the oxygen concentration operating limit requirement specified in Table 3 to this subpart.
- (c) You must conduct performance stack tests at the representative operating load conditions while burning the type of fuel or mixture of fuels that have the highest emissions potential for each regulated pollutant, and you must demonstrate initial compliance and establish your operating limits based on these performance stack tests. For subcategories with more than one emission limit, these requirements could result in the need to conduct more than one performance stack test. Following each performance stack test and until the next performance stack test, you must comply with the operating limit for operating load conditions specified in Table 3 to this subpart.
- (d) You must conduct a minimum of three separate test runs for each performance stack test required in this section, as specified in §63.7(e)(3) and in accordance with the provisions in Table 4 to this subpart.
- (e) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A-7 to part 60 of this chapter to convert the measured PM concentrations and the measured mercury concentrations that result from the performance test to pounds per million Btu heat input emission rates.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7508, Feb. 1, 2013]

40 CFR 63.11212(a) through (e) do not apply. The Boiler is not subject to an applicable emission limit.

§63.11213 What fuel analyses and procedures must I use for the performance tests?

- (a) You must conduct fuel analyses according to the procedures in paragraphs (b) and (c) of this section and Table 5 to this subpart, as applicable. You are not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. You are required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury in Table 1 of this subpart.
- (b) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in Table 5 to this subpart. Each composite sample must consist of a minimum of three samples collected at approximately equal intervals during a test run period.
- (c) Determine the concentration of mercury in the fuel in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 5 to this subpart.

40 CFR 63.11213(a) through (c) do not apply. The Boiler is not subject to an applicable emission limit and, therefore, not subject to the related required fuel analyses.

§63.11214 How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?

(a) If you own or operate an existing or new coal-fired boiler with a heat input capacity of less than 10 million Btu per hour, you must conduct a performance tune-up according to §63.11223(b) and you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.

40 CFR 63.11214(a) does not apply. The Boiler is not an existing or new coal-fired boiler.

(b) If you own or operate an existing or new biomass-fired boiler or an existing or new oil-fired boiler, you must conduct a performance tune-up according to §63.11223(b) and you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.

40 CFR 63.11214(b) Does apply. The Boiler is an existing biomass-fired boiler subject to a performance tune-up. The initial Notification of Compliance Status report was submitted on 4/16/2014.

(c) If you own or operate an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, you must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to this subpart and is an accurate depiction of your facility.

40 CFR 63.11214(c) does apply. The Boiler is an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater.

(d) If you own or operate a boiler subject to emission limits in Table 1 of this subpart, you must minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. You must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7508, Feb. 1, 2013]

40 CFR 63.11214(d) does not apply. The Boiler is not subject to emission limits in Table 1.

Continuous Compliance Requirements

§63.11220 When must I conduct subsequent performance tests or fuel analyses?

(a) If your boiler has a heat input capacity of 10 million British thermal units per hour or greater, you must conduct all applicable performance (stack) tests according to §63.11212 on a triennial basis, except as specified in paragraphs (b) through (d) of this section. Triennial performance tests must be completed no more than 37 months after the previous performance test.

40 CFR 63.11220(a) does not apply. 40 CFR 63.112212(a) through (e) do not apply. The Boiler is not subject to an applicable emission limit.

(b) When demonstrating initial compliance with the PM emission limit, if your boiler's performance test results show that your PM emissions are equal to or less than half of the PM emission limit, you do not need to conduct further performance tests for PM but must continue to comply with all applicable operating limits and monitoring requirements. If your initial performance test results show that your PM emissions are greater than half of the PM emission limit, you must conduct subsequent performance tests as specified in paragraph (a) of this section.

40 CFR 63.11220(b) does not apply. 40 CFR 63.112213(a) through (c) do not apply. The Boiler is not subject to an applicable emission limit and, therefore, not subject to the related required fuel analyses.

(c) If you demonstrate compliance with the mercury emission limit based on fuel analysis, you must conduct a fuel analysis according to §63.11213 for each type of fuel burned as specified in paragraphs (c)(1) and (2) of this section. If you plan to burn a new type of fuel or fuel mixture, you must conduct a fuel analysis before burning the new type of fuel or mixture in your boiler. You must recalculate the

mercury emission rate using Equation 1 of §63.11211. The recalculated mercury emission rate must be less than the applicable emission limit.

- (1) When demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are measured to be equal to or less than half of the mercury emission limit, you do not need to conduct further fuel analysis sampling but must continue to comply with all applicable operating limits and monitoring requirements.
- (2) When demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are greater than half of the mercury emission limit, you must conduct quarterly sampling.

40 CFR 63.11220(c). (c)(1) and (c)(2) do not apply. 40 CFR 63.112212(a) through (e) do not apply. The Boiler is not subject to an applicable emission limit.

(d) For existing affected boilers that have not operated since the previous compliance demonstration and more than 3 years have passed since the previous compliance demonstration, you must complete your subsequent compliance demonstration no later than 180 days after the re-start of the affected boiler.

[78 FR 7508, Feb. 1, 2013]

40 CFR 63.11220(d) does not currently apply.

§63.11221 Is there a minimum amount of monitoring data I must obtain?

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.11205(c).

40 CFR 63.11221(a) does not apply because 40 CFR 63.11205(c) does not apply. The Boiler is not subject to an applicable emission limit.

(b) You must operate the monitoring system and collect data at all required intervals at all times the affected source is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods (see §63.8(c)(7) of this part), repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in your site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.

40 CFR 63.11221(b) does not apply because 40 CFR 63.11205(b) does not apply. The Boiler is not subject to an applicable emission limit and is not required to operate a CMS.

(c) You may not use data collected during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or quality control activities in calculations used to report emissions or operating levels. Any such periods must be reported according to the requirements in §63.11225. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

40 CFR 63.11221 (c) does not apply because 40 CFR 63.11205(b) does not apply. The Boiler is not subject to an applicable emission limit and is not required to operate a CMS.

(d) Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in your site-specific monitoring plan), failure to collect required data is a deviation of the monitoring requirements.

[78 FR 7508, Feb. 1, 2013]

40 CFR 63.11221(d) does not apply because 40 CFR 63.11205(b) does not apply. The Boiler is not subject to an applicable emission limit and is not required to operate a CMS.

§63.11222 How do I demonstrate continuous compliance with the emission limits?

- (a) You must demonstrate continuous compliance with each emission limit and operating limit in Tables 1 and 3 to this subpart that applies to you according to the methods specified in Table 7 to this subpart and to paragraphs (a)(1) through (4) of this section.
 - (1) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§63.7 and 63.11196, whichever date comes first, you must continuously monitor the operating parameters. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in paragraph (a) of this section constitutes a deviation from your operating limits established under this subpart, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.

40 CFR 63.11222(a)(1) does not apply because the Boiler is not subject to an applicable operating limit in Table 3.

(2) If you have an applicable mercury or PM emission limit, you must keep records of the type and amount of all fuels burned in each boiler during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in lower emissions of mercury than the applicable emission limit (if you demonstrate compliance through fuel analysis), or result in lower fuel input of mercury than the maximum values calculated during the last performance stack test (if you demonstrate compliance through performance stack testing).

40 CFR 63.11222(a)(2) does not apply because the Boiler is not subject to an applicable emission limit.

- (3) If you have an applicable mercury emission limit and you plan to burn a new type of fuel, you must determine the mercury concentration for any new fuel type in units of pounds per million Btu, using the procedures in Equation 1 of §63.11211 based on supplier data or your own fuel analysis, and meet the requirements in paragraphs (a)(3)(i) or (ii) of this section.
 - (i) The recalculated mercury emission rate must be less than the applicable emission limit.
 - (ii) If the mercury concentration is higher than mercury fuel input during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.11212 to demonstrate that the mercury emissions do not exceed the emission limit.

40 CFR 63.11222(a)(3), (a)(3)(I), and (a)(3)(ii) do not apply because the Boiler is not subject to an applicable mercury emission limit.

(4) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak

detection system alarm and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm is counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken to initiate corrective action.

40 CFR 63.11221(d) does not apply because the Boiler is not controlled by a fabric filter.

(b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 and 3 to this subpart that apply to you. These instances are deviations from the emission limits in this subpart. These deviations must be reported according to the requirements in §63.11225.

40 CFR 63.11222(b) does not apply because the boiler is not subject to an emission or operating limit.

§63.11223 How do I demonstrate continuous compliance with the work practice and management practice standards?

(a) For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a performance tune-up according to paragraph (b) of this section and keep records as required in §63.11225(c) to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

40 CFR 63.11223(a) does apply because the Boiler is an existing biomass boiler subject to the tune-up requirements of 40 CFR 63.11214(b).

- (b) Except as specified in paragraphs (c) through (f) of this section, you must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. For a new or reconstructed boiler, the first biennial tune-up must be no later than 25 months after the initial startup of the new or reconstructed boiler.
 - (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.
 - (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.
 - (4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
 - (5) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be

- either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- (6) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section.
 - (i) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
 - (ii) A description of any corrective actions taken as a part of the tune-up of the boiler.
 - (iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
- (7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

40 CFR 63.11223(b) does apply because the Boiler is subject to the tune-up in accordance with 40 CFR 63.11214(b)

(c) Boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up must conduct a tune-up of the boiler every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed boiler with an oxygen trim system, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.

40 CFR 63.11223(c) does apply because the Boiler does have an oxygen trim system.

(d) Seasonal boilers must conduct a tune-up every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed seasonal boiler, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. Seasonal boilers are not subject to the emission limits in Table 1 to this subpart or the operating limits in Table 3 to this subpart.

40 CFR 63.11223(d) does not apply because the Boiler is not a seasonal boiler.

(e) Oil-fired boilers with a heat input capacity of equal to or less than 5 million Btu per hour must conduct a tune-up every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed oil-fired boiler with a heat input capacity of equal to or less than 5 million Btu per hour, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.

40 CFR 63.11223(e) does not apply because the Boiler is not an oil-fired boiler.

(f) Limited-use boilers must conduct a tune-up every 5 years as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed limited-use boiler, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. Limited-use boilers are not subject to the emission limits in Table 1 to this subpart, the energy assessment requirements in Table 2 to this subpart, or the operating limits in Table 3 to this subpart.

40 CFR 63.11223(f) does not apply because the Boiler is not a limited-use boiler.

(g) If you own or operate a boiler subject to emission limits in Table 1 of this subpart, you must minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. You must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7509, Feb. 1, 2013]

40 CFR 63.11223(g) does not apply because the Boiler is not subject to an emission limit in Table 1.

§63.11224 What are my monitoring, installation, operation, and maintenance requirements?

- (a) If your boiler is subject to a CO emission limit in Table 1 to this subpart, you must either install, operate, and maintain a CEMS for CO and oxygen according to the procedures in paragraphs (a)(1) through (6) of this section, or install, calibrate, operate, and maintain an oxygen analyzer system, as defined in §63.11237, according to the manufacturer's recommendations and paragraphs (a)(7) and (d) of this section, as applicable, by the compliance date specified in §63.11196. Where a certified CO CEMS is used, the CO level shall be monitored at the outlet of the boiler, after any add-on controls or flue gas recirculation system and before release to the atmosphere. Boilers that use a CO CEMS are exempt from the initial CO performance testing and oxygen concentration operating limit requirements specified in §63.11211(a) of this subpart. Oxygen monitors and oxygen trim systems must be installed to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location.
 - (1) Each CO CEMS must be installed, operated, and maintained according to the applicable procedures under Performance Specification 4, 4A, or 4B at 40 CFR part 60, appendix B, and each oxygen CEMS must be installed, operated, and maintained according to Performance Specification 3 at 40 CFR part 60, appendix B. Both the CO and oxygen CEMS must also be installed, operated, and maintained according to the site-specific monitoring plan developed according to paragraph (c) of this section.
 - (2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8(e) and according to Performance Specifications 3 and 4, 4A, or 4B at 40 CFR part 60, appendix B.
 - (3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) every 15 minutes. You must have CEMS data values from a minimum of four successive cycles of operation representing each of the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CEMS calibration, quality assurance, or maintenance activities are being performed, to have a valid hour of data.

- (4) The CEMS data must be reduced as specified in §63.8(g)(2).
- (5) You must calculate hourly averages, corrected to 3 percent oxygen, from each hour of CO CEMS data in parts per million CO concentrations and determine the 10-day rolling average of all recorded readings, except as provided in §63.11221(c). Calculate a 10-day rolling average from all of the hourly averages collected for the 10-day operating period using Equation 2 of this section.

10-day average =
$$\frac{\sum_{i=1}^{n} Hpvi}{n}$$
 (Eq.2)

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Where:

Hpvi = the hourly parameter value for hour i

n = the number of valid hourly parameter values collected over 10 boiler operating days

(6) For purposes of collecting CO data, you must operate the CO CEMS as specified in §63.11221(b). For purposes of calculating data averages, you must use all the data collected during all periods in assessing compliance, except that you must exclude certain data as specified in §63.11221(c). Periods when CO data are unavailable may constitute monitoring deviations as specified in §63.11221(d).

40 CFR 63.11224(a), and (a)(1) through (a)(6) do not apply because the Boiler is not subject to a CO emission limit in table 1.

- (7) You must operate the oxygen analyzer system at or above the minimum oxygen level that is established as the operating limit according to Table 6 to this subpart when firing the fuel or fuel mixture utilized during the most recent CO performance stack test. Operation of oxygen trim systems to meet these requirements shall not be done in a manner which compromises furnace safety.
- 40 CFR 63.11224(a)(7) does not apply because the Boiler is not subject to an emission limit in table 1.
 - (b) If you are using a control device to comply with the emission limits specified in Table 1 to this subpart, you must maintain each operating limit in Table 3 to this subpart that applies to your boiler as specified in Table 7 to this subpart. If you use a control device not covered in Table 3 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under §63.8(f).
- 40 CFR 63.11224(b) does not apply because the Boiler is not subject to an emission limit in table 1.
 - (c) If you demonstrate compliance with any applicable emission limit through stack testing and subsequent compliance with operating limits, you must develop a site-specific monitoring plan according to the requirements in paragraphs (c)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).
 - (1) For each CMS required in this section, you must develop, and submit to the EPA Administrator for approval upon request, a site-specific monitoring plan that addresses paragraphs (c)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan (if requested) at least 60 days before your initial performance evaluation of your CMS.

- (i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).
- (ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems.
- (iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

40 CFR 63.11224(c)(1), and (c)(1)(i) and (c)(1)(ii1) do not apply because the Boiler is not subject to an emission limit in table 1 and is not subject to a CMS.

- (2) In your site-specific monitoring plan, you must also address paragraphs (c)(2)(i) through (iii) of this section.
 - (i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), and (4)(ii).
 - (ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d).
 - (iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

40 CFR 63.11224(c)(2), and (c)(2)(i) and (c)(2)(iii) do not apply because the Boiler is not subject to an emission limit in table 1 and is not required to have a site-specific monitoring plan in accordance with 40 CFR 63.11205.

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

40 CFR 63.11224(c)(3) does not apply because the Boiler is not subject to an emission limit in table 1 and is not subject to a CMS.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

40 CFR 63.11224(c)(4) does not apply because the Boiler is not subject to an emission limit in table 1 and is not subject to a CMS.

- (d) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each CPMS according to the procedures in paragraphs (d)(1) through (4) of this section.
 - (1) The CPMS must complete a minimum of one cycle of operation every 15 minutes. You must have data values from a minimum of four successive cycles of operation representing each of the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed, to have a valid hour of data.
 - (2) You must calculate hourly arithmetic averages from each hour of CPMS data in units of the operating limit and determine the 30-day rolling average of all recorded readings, except as provided in §63.11221(c). Calculate a 30-day rolling average from all of the hourly averages collected for the 30-day operating period using Equation 3 of this section.

30-day average =
$$\frac{\sum_{l=1}^{n} Hpvi}{n}$$
 (Eq.3)

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Where:

Hpvi = the hourly parameter value for hour i

- n = the number of valid hourly parameter values collected over 30 boiler operating days
 - (3) For purposes of collecting data, you must operate the CPMS as specified in §63.11221(b). For purposes of calculating data averages, you must use all the data collected during all periods in assessing compliance, except that you must exclude certain data as specified in §63.11221(c). Periods when CPMS data are unavailable may constitute monitoring deviations as specified in §63.11221(d).
 - (4) Record the results of each inspection, calibration, and validation check.

40 CFR 63.11224(d) and (d)(1) through (4) do not apply because the Boiler is not subject to an operating limit .

- (e) If you have an applicable opacity operating limit under this rule, you must install, operate, certify and maintain each COMS according to the procedures in paragraphs (e)(1) through (8) of this section by the compliance date specified in §63.11196.
 - (1) Each COMS must be installed, operated, and maintained according to Performance Specification 1 of 40 CFR part 60, appendix B.
 - (2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and according to Performance Specification 1 of 40 CFR part 60, appendix B.
 - (3) As specified in §63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
 - (4) The COMS data must be reduced as specified in §63.8(g)(2).
 - (5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.
 - (6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). You must identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit.
 - (7) You must calculate and record 6-minute averages from the opacity monitoring data and determine and record the daily block average of recorded readings, except as provided in §63.11221(c).
 - (8) For purposes of collecting opacity data, you must operate the COMS as specified in §63.11221(b). For purposes of calculating data averages, you must use all the data collected during all periods in assessing compliance, except that you must exclude certain data as specified in §63.11221(c). Periods when COMS data are unavailable may constitute monitoring deviations as specified in §63.11221(d).

40 CFR 63.11224(e) and (e)(1) through (8) do not apply because the Boiler is not subject to an opacity operating limit.

- (f) If you use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate the bag leak detection system as specified in paragraphs (f)(1) through (8) of this section.
 - (1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

- (2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with EPA-454/R-98-015 (incorporated by reference, see §63.14).
- (3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.
- (4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.
- (5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- (6) The bag leak detection system must be equipped with an audible or visual alarm system that will activate automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard or seen by plant operating personnel.
- (7) For positive pressure fabric filter systems that do not duct all compartments or cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.
- (8) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7510, Feb. 1, 2013]

40 CFR 63.11224(f) and (f)(1) through (8) do not apply because the permittee does not use fabric filter bag leak detection system to comply with the requirements of this subpart.

§63.11225 What are my notification, reporting, and recordkeeping requirements?

- (a) You must submit the notifications specified in paragraphs (a)(1) through (5) of this section to the administrator.
 - (1) You must submit all of the notifications in §§63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to you by the dates specified in those sections except as specified in paragraphs (a)(2) and (4) of this section.
- 40 CFR 63.11225(a) and (a)(1) applies to each 5-yr boiler tune-up.
 - (2) An Initial Notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard.
- 40 CFR 63.11225(a)(2) applies but has been satisfied.
 - (3) If you are required to conduct a performance stack test you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance stack test is scheduled to begin.

40 CFR 63.11225(a)(3) does not apply because the boiler is not subject to an emission limitation under this rule.

(4) You must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in §63.11196 unless you must conduct a performance stack test. If you must conduct a performance stack test, you must submit the Notification of Compliance Status within 60 days of completing the performance stack test. You must submit the Notification of Compliance Status in accordance with paragraphs (a)(4)(i) and (vi) of this section. The Notification of Compliance Status must include the information and certification(s) of

compliance in paragraphs (a)(4)(i) through (v) of this section, as applicable, and signed by a responsible official.

40 CFR 63.11225(a)(4) generally applies. The compliance date is 03/21/14. The permittee is not subject to a performance stack test requirement. NOTE: The Notification of Compliance Status is required for each 5-yr boiler tune-up.

- (i) You must submit the information required in §63.9(h)(2), except the information listed in §63.9(h)(2)(i)(B), (D), (E), and (F). If you conduct any performance tests or CMS performance evaluations, you must submit that data as specified in paragraph (e) of this section. If you conduct any opacity or visible emission observations, or other monitoring procedures or methods, you must submit that data to the Administrator at the appropriate address listed in §63.13.
- (ii) "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler."
- (iii) "This facility has had an energy assessment performed according to §63.11214(c)."
- (iv) For units that install bag leak detection systems: "This facility complies with the requirements in §63.11224(f)."
- (v) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."
- (vi) The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in §63.13.

40 CFR 63.11225(a)(4), and (a)(4)(i) through (v) generally applies. The compliance date is 03/21/14. The permittee is not subject to a performance stack test requirement.

(5) If you are using data from a previously conducted emission test to serve as documentation of conformance with the emission standards and operating limits of this subpart, you must include in the Notification of Compliance Status the date of the test and a summary of the results, not a complete test report, relative to this subpart.

40 CFR 63.11225(a)(5) does not apply. The permittee is not subject to a performance stack test requirement.

- (b) You must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of this section. You must submit the report by March 15 if you had any instance described by paragraph (b)(3) of this section. For boilers that are subject only to a requirement to conduct a biennial or 5-year tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section.
 - (1) Company name and address.
 - (2) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

- (i) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."
- (ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."
- (iii) "This facility complies with the requirement in §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."
- (3) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.
- (4) The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by you or EPA through a petition process to be a non-waste under §241.3(c), whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of §241.3, and the total fuel usage amount with units of measure.

40 CFR 63.11225(b), (b)(1), (b)(2)(i), and (b)(3) apply. 40 CFR 63.11225(b)(2)(ii) does not apply because the boiler is not a solid waste incineration unit. 40 CFR 63.11225(b)(2)(iii) and (b)(4) do not apply because the boiler is not subject to an emission limit.

(c) You must maintain the records specified in paragraphs (c)(1) through (7) of this section.

40 CFR 63.11225(c) is a general administrative requirement that applies.

(1) As required in §63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

40 CFR 63.11225(c)(1) is a general administrative requirement that applies.

- (2) You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 and §63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section.
 - (i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

40 CFR 63.11225(c)(2)(i) applies because the boiler is subject to a tune-up requirement.

(ii) For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(1) of this chapter, you must keep a record which documents how the secondary material meets each of the legitimacy criteria under §241.3(d)(1). If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4) of this chapter, you must keep records as to how the operations that produced the fuel satisfies the definition of processing in §241.2 and each of the legitimacy criteria in §241.3(d)(1) of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c) of this chapter, you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel

per §241.4, you must keep records documenting that the material is a listed non-waste under §241.4(a).

40 CFR 63.11225(c)(2)(ii) does not apply because the boiler does not combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(1) of this chapter.

(iii) For each boiler required to conduct an energy assessment, you must keep a copy of the energy assessment report.

40 CFR 63.11225(c)(2)(ii1) does apply because the boiler is required to conduct an energy assessment.

(iv) For each boiler subject to an emission limit in Table 1 to this subpart, you must also keep records of monthly fuel use by each boiler, including the type(s) of fuel and amount(s) used.

40 CFR 63.11225(c)(2)(iv) does not apply because the boiler is not subject to an emission limit In Table 1 to this subpart.

(v) For each boiler that meets the definition of seasonal boiler, you must keep records of days of operation per year.

40 CFR 63.11225(c)(2)(v) does not apply because the boiler does not meet the definition of seasonal boiler.

(vi) For each boiler that meets the definition of limited-use boiler, you must keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and records of fuel use for the days the boiler is operating.

40 CFR 63.11225(c)(2)(vi) does not apply because the boiler does not meet the definition of limited-use boiler.

(3) For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation that were done to demonstrate compliance with the mercury emission limits. Supporting documentation should include results of any fuel analyses. You can use the results from one fuel analysis for multiple boilers provided they are all burning the same fuel type.

40 CFR 63.11225(c)(3) does not apply because the boiler is not required demonstrate compliance through fuel analysis.

(4) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.

40 CFR 63.11225(c)(4) does apply.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

40 CFR 63.11225(c)(5) does apply.

- (6) You must keep the records of all inspection and monitoring data required by §§63.11221 and 63.11222, and the information identified in paragraphs (c)(6)(i) through (vi) of this section for each required inspection or monitoring.
 - (i) The date, place, and time of the monitoring event.
 - (ii) Person conducting the monitoring.
 - (iii) Technique or method used.
 - (iv) Operating conditions during the activity.
 - (v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.
 - (vi) Maintenance or corrective action taken (if applicable).

40 CFR 63.11225(c)(6) does not apply. The requirements of 40 CFR 63.11221 does not apply because 40 CFR 63.11205(b) does not apply. The Boiler is not subject to an applicable emission limit and is not required to operate a CMS. The requirements of 40 CFR 63.11222 do not apply. See 40 CFR 63.11222 for applicability.

- (7) If you use a bag leak detection system, you must keep the records specified in paragraphs (c)(7)(i) through (iii) of this section.
 - (i) Records of the bag leak detection system output.
 - (ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings.
 - (iii) The date and time of all bag leak detection system alarms, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

40 CFR 63.11225(c)(7) and (c)(7)(i) through (III) does not apply because the permittee does not use a bag leak detection system.

(d) Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years.

40 CFR 63.11225(d) is an administrative requirement that generally applies.

(e)(1) Within 60 days after the date of completing each performance test (defined in §63.2) as required by this subpart you must submit the results of the performance tests, including any associated fuel analyses, required by this subpart to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted

to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator at the appropriate address listed in §63.13.

40 CFR 63.11225(e)(1) does not apply because the permittee is not required to perform a performance stack test.

(2) Within 60 days after the date of completing each CEMS performance evaluation test as defined in §63.2, you must submit relative accuracy test audit (RATA) data to EPA's CDX by using CEDRI in accordance with paragraph (e)(1) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator shall submit the results of the performance evaluation in paper submissions to the Administrator at the appropriate address listed in §63.13.

40 CFR 63.11225(e)(2) does not apply because the permittee is not required to perform a performance evaluation test.

- (f) If you intend to commence or recommence combustion of solid waste, you must provide 30 days prior notice of the date upon which you will commence or recommence combustion of solid waste. The notification must identify:
 - (1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that will commence burning solid waste, and the date of the notice.
 - (2) The currently applicable subcategory under this subpart.
 - (3) The date on which you became subject to the currently applicable emission limits.
 - (4) The date upon which you will commence combusting solid waste.

40 CFR 63.11225(f), and (f)(1) through (4) does not apply because the permittee does not intend to commence or recommence combustion of solid waste.

- (g) If you have switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within subpart JJJJJJ, in the boiler becoming subject to subpart JJJJJJ, or in the boiler switching out of subpart JJJJJJ due to a change to 100 percent natural gas, or you have taken a permit limit that resulted in you being subject to subpart JJJJJJ, you must provide notice of the date upon which you switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify:
 - (1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.
 - (2) The date upon which the fuel switch, physical change, or permit limit occurred.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7511, Feb. 1, 2013]

40 CFR 63.11225(g), (g)(1), and (g)(2) is an administrative requirement that generally applies.

§63.11226 Affirmative defense for violation of emission standards during malfunction.

In response to an action to enforce the standards set forth in §63.11201 you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed if you fail to meet your burden of proving

all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

- (a) Assertion of affirmative defense. To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:
 - (1) The violation:
 - (i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and
 - (ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and
 - (iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and
 - (iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
 - (2) Repairs were made as expeditiously as possible when a violation occurred; and
 - (3) The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and
 - (4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and
 - (6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and
 - (7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and
 - (8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and
 - (9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.
- (b) Report. The owner or operator seeking to assert an affirmative defense shall submit a written report to the Administrator with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. This affirmative defense report shall be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

[78 FR 7513, Feb. 1, 2013]

40 CFR 63.11226 is an administrative requirement that generally applies.

Other Requirements and Information

§63.11235 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

40 CFR 63.11235 is an administrative requirement that generally applies.

§63.11236 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by EPA or an administrator such as your state, local, or tribal agency. If the EPA Administrator has delegated authority to your state, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your state, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a state, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraphs (c) of this section are retained by the EPA Administrator and are not transferred to the state, local, or tribal agency.
- (c) The authorities that cannot be delegated to state, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.
 - (1) Approval of an alternative non-opacity emission standard and work practice standards in §63.11223(a).
 - (2) Approval of alternative opacity emission standard under §63.6(h)(9).
 - (3) Approval of major change to test methods under §63.7(e)(2)(ii) and (f). A "major change to test method" is defined in §63.90.
 - (4) Approval of a major change to monitoring under §63.8(f). A "major change to monitoring" is defined in §63.90.
 - (5) Approval of major change to recordkeeping and reporting under §63.10(f). A "major change to recordkeeping/reporting" is defined in §63.90.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7513, Feb. 1, 2013]

40 CFR 63.11236 is an administrative requirement that generally applies.

§63.11237 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2 (the General Provisions), and in this section as follows:

10-day rolling average means the arithmetic mean of all valid hours of data from 10 successive operating days, except for periods of startup and shutdown and periods when the unit is not operating.

30-day rolling average means the arithmetic mean of all valid hours of data from 30 successive operating days, except for periods of startup and shutdown and periods when the unit is not operating.

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

Annual heat input means the heat input for the 12 months preceding the compliance demonstration.

Bag leak detection system means a group of instruments that are capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) in order to detect bag failures. A bag leak detection

system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Biodiesel means a mono-alkyl ester derived from biomass and conforming to ASTM D6751-11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels (incorporated by reference, see §63.14).

Biomass means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition of biomass is not intended to suggest that these materials are or are not solid waste.

Biomass subcategory includes any boiler that burns any biomass and is not in the coal subcategory.

Boiler means an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. A device combusting solid waste, as defined in §241.3 of this chapter, is not a boiler unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Waste heat boilers, process heaters, and autoclaves are excluded from the definition of Boiler.

Boiler system means the boiler and associated components, such as, feedwater systems, combustion air systems, fuel systems (including burners), blowdown systems, combustion control systems, steam systems, and condensate return systems, directly connected to and serving the energy use systems.

Calendar year means the period between January 1 and December 31, inclusive, for a given year.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Materials in ASTM D388 (incorporated by reference, see §63.14), coal refuse, and petroleum coke. For the purposes of this subpart, this definition of "coal" includes synthetic fuels derived from coal including, but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures. Coal derived gases are excluded from this definition.

Coal subcategory includes any boiler that burns any solid fossil fuel and no more than 15 percent biomass on an annual heat input basis.

Commercial boiler means a boiler used in commercial establishments such as hotels, restaurants, and laundries to provide electricity, steam, and/or hot water.

Common stack means the exhaust of emissions from two or more affected units through a single flue. Affected units with a common stack may each have separate air pollution control systems located before the common stack, or may have a single air pollution control system located after the exhausts come together in a single flue.

Daily block average means the arithmetic mean of all valid emission concentrations or parameter levels recorded when a unit is operating measured over the 24-hour period from 12 a.m. (midnight) to 12 a.m. (midnight), except for periods of startup and shutdown and periods when the unit is not operating.

Deviation (1) Means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (i) Fails to meet any applicable requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or
- (ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.
 - (2) A deviation is not always a violation.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §63.14) or diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §63.14), kerosene, and biodiesel as defined by the American Society of Testing and Materials in ASTM D6751-11b (incorporated by reference, see §63.14).

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems used as control devices in fluidized bed boilers and process heaters are included in this definition. A dry scrubber is a dry control system.

Electric boiler means a boiler in which electric heating serves as the source of heat. Electric boilers that burn gaseous or liquid fuel during periods of electrical power curtailment or failure are included in this definition.

Electric utility steam generating unit (EGU) means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit. To be "capable of combusting" fossil fuels, an EGU would need to have these fuels allowed in their operating permits and have the appropriate fuel handling facilities on-site or otherwise available (e.g., coal handling equipment, including coal storage area, belts and conveyers, pulverizers, etc.; oil storage facilities). In addition, fossil fuel-fired EGU means any EGU that fired fossil fuel for more than 10.0 percent of the average annual heat input in any 3 consecutive calendar years or for more than 15.0 percent of the annual heat input during any one calendar year after April 16, 2015.

Electrostatic precipitator (ESP) means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper. An electrostatic precipitator is usually a dry control system.

Energy assessment means the following for the emission units covered by this subpart:

- (1) The energy assessment for facilities with affected boilers with less than 0.3 trillion Btu per year (TBtu/year) heat input capacity will be 8 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 50 percent of the affected boiler(s) energy (e.g., steam, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing an 8-hour energy assessment.
- (2) The energy assessment for facilities with affected boilers with 0.3 to 1.0 TBtu/year heat input capacity will be 24 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 33 percent of the affected boiler(s) energy (e.g., steam, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing a 24-hour energy assessment.

- (3) The energy assessment for facilities with affected boilers with greater than 1.0 TBtu/year heat input capacity will be up to 24 on-site technical labor hours in length for the first TBtu/year plus 8 on-site technical labor hours for every additional 1.0 TBtu/year not to exceed 160 on-site technical hours, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 20 percent of the affected boiler(s) energy (e.g., steam, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities.
- (4) The on-site energy use system(s) serving as the basis for the percent of affected boiler(s) energy production, as applicable, in paragraphs (1), (2), and (3) of this definition may be segmented by production area or energy use area as most logical and applicable to the specific facility being assessed (e.g., product X manufacturing area; product Y drying area; Building Z).

Energy management program means a program that includes a set of practices and procedures designed to manage energy use that are demonstrated by the facility's energy policies, a facility energy manager and other staffing responsibilities, energy performance measurement and tracking methods, an energy saving goal, action plans, operating procedures, internal reporting requirements, and periodic review intervals used at the facility. Facilities may establish their program through energy management systems compatible with ISO 50001.

Energy use system (1) Includes the following systems located on the site of the affected boiler that use energy provided by the boiler:

- (i) Process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air conditioning systems; hot water systems; building envelop; and lighting; or
 - (ii) Other systems that use steam, hot water, process heat, or electricity, provided by the affected boiler.
 - (2) Energy use systems are only those systems using energy clearly produced by affected boilers.

Equivalent means the following only as this term is used in Table 5 to this subpart:

(1) An equivalent sample collection procedure means a published voluntary consensus standard or practice (VCS) or

EPA method that includes collection of a minimum of three composite fuel samples, with each composite consisting of a minimum of three increments collected at approximately equal intervals over the test period.

- (2) An equivalent sample compositing procedure means a published VCS or EPA method to systematically mix and obtain a representative subsample (part) of the composite sample.
- (3) An equivalent sample preparation procedure means a published VCS or EPA method that: Clearly states that the standard, practice or method is appropriate for the pollutant and the fuel matrix; or is cited as an appropriate sample preparation standard, practice or method for the pollutant in the chosen VCS or EPA determinative or analytical method.
- (4) An equivalent procedure for determining heat content means a published VCS or EPA method to obtain gross calorific (or higher heating) value.
- (5) An equivalent procedure for determining fuel moisture content means a published VCS or EPA method to obtain moisture content. If the sample analysis plan calls for determining mercury using an aliquot of the dried sample, then the drying temperature must be modified to prevent vaporizing this metal. On the other hand, if metals analysis is done on an "as received" basis, a separate aliquot can be dried to determine moisture content and the mercury concentration mathematically adjusted to a dry basis.

(6) An equivalent mercury determinative or analytical procedure means a published VCS or EPA method that clearly states that the standard, practice, or method is appropriate for mercury and the fuel matrix and has a published detection limit equal or lower than the methods listed in Table 5 to this subpart for the same purpose.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse. A fabric filter is a dry control system.

Federally enforceable means all limitations and conditions that are enforceable by the EPA Administrator, including, but not limited to, the requirements of 40 CFR parts 60, 61, 63, and 65, requirements within any applicable state implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed boiler means a boiler utilizing a fluidized bed combustion process that is not a pulverized coal boiler.

Fluidized bed combustion means a process where a fuel is burned in a bed of granulated particles, which are maintained in a mobile suspension by the forward flow of air and combustion products.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, sub-bituminous coal, lignite, anthracite, biomass, distillate oil, residual oil. Individual fuel types received from different suppliers are not considered new fuel types.

Gaseous fuels includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, hydrogen, and biogas.

Gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Heat input means heat derived from combustion of fuel in a boiler and does not include the heat input from preheated combustion air, recirculated flue gases, returned condensate, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous, liquid, or biomass fuel and hot water is withdrawn for use external to the vessel. Hot water boilers (i.e., not generating steam) combusting gaseous, liquid, or biomass fuel with a heat input capacity of less than 1.6 million Btu per hour are included in this definition. The 120 U.S. gallon capacity threshold to be considered a hot water heater is independent of the 1.6 million Btu per hour heat input capacity threshold for hot water boilers. Hot water heater also means a tankless unit that provides on-demand hot water.

Hourly average means the arithmetic average of at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

Institutional boiler means a boiler used in institutional establishments such as, but not limited to, medical centers, nursing homes, research centers, institutions of higher education, elementary and secondary schools, libraries, religious establishments, and governmental buildings to provide electricity, steam, and/or hot water.

Limited-use boiler means any boiler that burns any amount of solid or liquid fuels and has a federally enforceable average annual capacity factor of no more than 10 percent.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, any form of liquid fuel derived from petroleum, used oil meeting the specification in 40 CFR 279.11, liquid biofuels, biodiesel, and vegetable oil, and comparable fuels as defined under 40 CFR 261.38.

Load fraction means the actual heat input of a boiler divided by heat input during the performance test that established the minimum sorbent injection rate or minimum activated carbon injection rate, expressed as a fraction (e.g., for 50 percent load the load fraction is 0.5).

Minimum activated carbon injection rate means load fraction multiplied by the lowest hourly average activated carbon injection rate measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limit.

Minimum oxygen level means the lowest hourly average oxygen level measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable carbon monoxide emission limit.

Minimum scrubber liquid flow rate means the lowest hourly average scrubber liquid flow rate (e.g., to the particulate matter scrubber) measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limit.

Minimum scrubber pressure drop means the lowest hourly average scrubber pressure drop measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limit.

Minimum sorbent injection rate means:

- (1) The load fraction multiplied by the lowest hourly average sorbent injection rate for each sorbent measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limits; or
- (2) For fluidized bed combustion, the lowest average ratio of sorbent to sulfur measured during the most recent performance test.

Minimum total secondary electric power means the lowest hourly average total secondary electric power determined from the values of secondary voltage and secondary current to the electrostatic precipitator measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limits.

Natural gas means:

- (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
- (2) Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see $\S63.14$); or
- (3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions (i.e., a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals). Additionally, natural gas must

either be composed of at least 70 percent methane by volume or have a gross calorific value between 35 and 41 megajoules (MJ) per dry standard cubic meter (950 and 1,100 Btu per dry standard cubic foot); or

(4) Propane or propane-derived synthetic natural gas. Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C3H8.

Oil subcategory includes any boiler that burns any liquid fuel and is not in either the biomass or coal subcategories. Gas-fired boilers that burn liquid fuel only during periods of gas curtailment, gas supply interruptions, startups, or for periodic testing are not included in this definition. Periodic testing on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Operating day means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the boiler unit. It is not necessary for fuel to be combusted for the entire 24-hour period.

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location. This definition includes oxygen trim systems.

Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller.

Particulate matter (PM) means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an approved alternative method.

Performance testing means the collection of data resulting from the execution of a test method used (either by stack testing or fuel analysis) to demonstrate compliance with a relevant emission standard.

Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

Process heater means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. Process heaters include units that heat water/water mixtures for pool heating, sidewalk heating, cooling tower water heating, power washing, or oil heating.

Oualified energy assessor means:

(1) Someone who has demonstrated capabilities to evaluate energy savings opportunities for steam generation and major energy using systems, including, but not limited to:

- (i) Boiler combustion management.
- (ii) Boiler thermal energy recovery, including
- (A) Conventional feed water economizer,
- (B) Conventional combustion air preheater, and
- (C) Condensing economizer.
- (iii) Boiler blowdown thermal energy recovery.
- (iv) Primary energy resource selection, including
- (A) Fuel (primary energy source) switching, and
- (B) Applied steam energy versus direct-fired energy versus electricity.
- (v) Insulation issues.
- (vi) Steam trap and steam leak management.
- (vii) Condensate recovery.
- (viii) Steam end-use management.
- (2) Capabilities and knowledge includes, but is not limited to:
- (i) Background, experience, and recognized abilities to perform the assessment activities, data analysis, and report preparation.
 - (ii) Familiarity with operating and maintenance practices for steam or process heating systems.
- (iii) Additional potential steam system improvement opportunities including improving steam turbine operations and reducing steam demand.
- (iv) Additional process heating system opportunities including effective utilization of waste heat and use of proper process heating methods.
 - (v) Boiler-steam turbine cogeneration systems.
 - (vi) Industry specific steam end-use systems.

Regulated gas stream means an offgas stream that is routed to a boiler for the purpose of achieving compliance with a standard under another subpart of this part or part 60, part 61, or part 65 of this chapter.

Residential boiler means a boiler used to provide heat and/or hot water and/or as part of a residential combined heat and power system. This definition includes boilers located at an institutional facility (e.g., university campus, military base, church grounds) or commercial/industrial facility (e.g., farm) used primarily to provide heat and/or hot water for:

- (1) A dwelling containing four or fewer families, or
- (2) A single unit residence dwelling that has since been converted or subdivided into condominiums or apartments.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society of Testing and Materials in ASTM D396-10 (incorporated by reference, see §63.14(b)).

Responsible official means responsible official as defined in §70.2.

Seasonal boiler means a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) each 12-month period due to seasonal conditions, except for periodic testing. Periodic testing shall not exceed a combined total of 15 days during the 7-month shutdown. This definition only applies to boilers that would otherwise be included in the biomass subcategory or the oil subcategory.

Shutdown means the cessation of operation of a boiler for any purpose. Shutdown begins either when none of the steam or heat from the boiler is supplied for heating and/or producing electricity, or for any other purpose, or at the point of no fuel being fired in the boiler, whichever is earlier. Shutdown ends when there is no steam and no heat being supplied and no fuel being fired in the boiler.

Solid fossil fuel includes, but is not limited to, coal, coke, petroleum coke, and tire-derived fuel.

Solid fuel means any solid fossil fuel or biomass or bio-based solid fuel.

Startup means either the first-ever firing of fuel in a boiler for the purpose of supplying steam or heat for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam or heat from the boiler is supplied for heating and/or producing electricity, or for any other purpose.

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A boiler is not a temporary boiler if any one of the following conditions exists:

- (1) The equipment is attached to a foundation.
- (2) The boiler or a replacement remains at a location within the facility and performs the same or similar function for more than 12 consecutive months, unless the regulatory agency approves an extension. An extension may be granted by the regulating agency upon petition by the owner or operator of a unit specifying the basis for such a request. Any temporary boiler that replaces a temporary boiler at a location within the facility and performs the same or similar function will be included in calculating the consecutive time period unless there is a gap in operation of 12 months or more.
- (3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
- (4) The equipment is moved from one location to another within the facility but continues to perform the same or similar function and serve the same electricity, steam, and/or hot water system in an attempt to circumvent the residence time requirements of this definition.

Tune-up means adjustments made to a boiler in accordance with the procedures outlined in $\S63.11223(b)$.

Vegetable oil means oils extracted from vegetation.

Voluntary Consensus Standards (VCS) mean technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. EPA/Office of Air Quality Planning and Standards, by precedent, has only used VCS that are written in English. Examples of VCS bodies are: American Society of Testing and Materials (ASTM 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-B2959, (800) 262-1373, http://www.astm.org), American Society of Mechanical Engineers (ASME ASME, Three Park Avenue, New York, NY 10016-5990, (800) 843-2763, http://www.asme.org), International Standards Organization (ISO 1, ch. de la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland, + 41 22 749 01 11, http://www.iso.org/iso/home.htm), Standards Australia (AS Level 10, The Exchange Centre, 20 Bridge Street, Sydney, GPO Box 476, Sydney NSW 2001, + 61 2 9237 6171 http://www.stadards.org.au), British Standards Institution (BSI, 389 Chiswick High Road, London, W4 4AL, United Kingdom, + 44 (0)20 8996 9001, http://www.bsigroup.com), Canadian Standards Association (CSA 5060 Spectrum Way, Suite 100, Mississauga, Ontario L4W 5N6, Canada, 800-463-6727, http://www.csa.ca), European Committee for Standardization (CEN CENELEC Management Centre Avenue Marnix 17 B-1000 Brussels, Belgium + 32 2 550 08 11, http://www.cen.eu/cen), and German Engineering Standards (VDI VDI Guidelines Department, P.O. Box 10 11 39 40002, Duesseldorf, Germany, + 49 211 6214-230, http://www.vdi.eu). The types of standards that are not considered VCS are standards developed by: the United States, e.g., California (CARB) and Texas (TCEQ); industry groups, such as American Petroleum Institute (API), Gas Processors Association (GPA), and Gas Research Institute (GRI); and other branches of the U.S. government, e.g., Department of Defense (DOD) and Department of Transportation (DOT). This does not preclude EPA from using standards developed by groups that are not VCS bodies within their rule. When this occurs, EPA has done searches and reviews for VCS equivalent to these non-EPA methods.

Waste heat boiler means a device that recovers normally unused energy (i.e., hot exhaust gas) and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators. Waste heat boilers are heat exchangers generating steam from incoming hot exhaust gas from an industrial (e.g., thermal oxidizer, kiln, furnace) or power (e.g., combustion turbine, engine) equipment. Duct burners are sometimes used to increase the temperature of the incoming hot exhaust gas.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler to control emissions of particulate matter or to absorb and neutralize acid gases, such as hydrogen chloride. A wet scrubber creates an aqueous stream or slurry as a byproduct of the emissions control process.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, which is promulgated pursuant to section 112(h) of the Clean Air Act.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7513, Feb. 1, 2013]

40 CFR 63.11237 is an administrative requirement that generally applies.

Table 1 to Subpart JJJJJJ of Part 63 – Emission Limits

As stated in §63.11201, you must comply with the following applicable emission limits:

If your boiler is in this subcategory	For the following pollutants	You must achieve less than or equal to the following emissions limits, except during periods of startup and shutdown
New coal-fired boilers with heat input capacity of 30 MMBtu/hr or greater that do not meet the definition of limited-use boiler	a. PM (filterable) b. Mercury	3.0E-02 pounds(lb) per million British thermal units (MMBtu) of heat input. 202E-05 lb per MMBtu of heat input.

		c. CO	420 parts per million (ppm) by volume on a dry basis corrected to 3% oxygen (3-run average or 10-day rolling average).
2.	New coal-fired boilers with heat input capacity of between 10 and 30 MMbtu/hr that do not meet	a. PM (filerable)	4.2E-01 lb per MMBtu of heat input.
	the definition of limited-use boiler	b. Mercury	2.2E-05 lb per MMBtu of heat input.
		c. CO	420 parts per million (ppm) by volume on a dry basis corrected to 3% oxygen (3-run average or 10-day rolling average).
3.	New biomass-fired boilers with heat input capacity of 30 MMBtu/hr or greater that do not meet the definition of seasonal boiler or limiteduse boiler	PM (filterable)	3.0E-02 lb per MMBtu of heat input.
4.	New biomass-fired boilers with heat input capacity of between 10 and 30 MMBtu/hr that do not meet the definition of seasonal boiler or limited-use boiler	PM (filterable)	7.0E-02 lb per MMBtu of heat input.
5.	New oil-fired boilers with heat input capacity of 10 MMBtu/hr or greater that do not meet the definition of seasonal boiler or limited-use boiler	PM (filterable)	3.0E-02 lb per MMBtu of heat input.
6.	Existing coal-fired boilers with heat input capacity of 10 MMBtu/hr or greater that do not meet the	a. Mercury	2.2E-05 lb per MMBtu of heat input.
	definition of limited-use boiler	b. CO	420 ppm by volume on a dry basis corrected to 3% oxygen

[78 FR 7517, Feb. 1,2013]

Table 1 does not apply. The facility's boiler is not in any referenced subcategories

Table 2 to Subpart JJJJJJ of Part 63-Work Practice Standards, Emission Reduction Measures, and Management Practices

As stated in §63.11201, you must comply with the following applicable work practice standards, emission reduction measures, and management practices:

If your boiler is in this subcategory	You must meet the following
Existing or new coal-fired, new biomass- fired, or new oil-fired boilers (units with heat input capacity of 10 MMBtu/hr or greater)	Minimize the boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.
Existing coal-fired boilers with heat input capacity of less than 10 MMBtu/hr that do not meet the definition of limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler biennially as specified in §63.11223.
3. New coal-fired boilers with heat input capacity of less than 10 MMBtu/hr that do not meet the definition of limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio	Conduct a tune-up of the boiler biennially as specified in §63.11223.

4. Existing oil-fired boilers with heat input capacity greater than 5 MMBtu/hr that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler biennially as specified in §63.11223.
5. New oil-fired boilers with heat input capacity greater than 5 MMBtu/hr that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio	Conduct a tune-up of the boiler biennially as specified in §63.11223.
6. Existing biomass-fired boilers that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler biennially as specified in §63.11223.
7. New biomass-fired boilers that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio	Conduct a tune-up of the boiler biennially as specified in §63.11223.
8. Existing seasonal boilers	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223.
9. New seasonal boilers	Conduct a tune-up of the boiler every 5 years as specified in §63.11223.
10. Existing limited-use boilers	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223.
11. New limited-use boilers	Conduct a tune-up of the boiler every 5 years as specified in §63.11223.
12. Existing oil-fired boilers with heat input capacity of equal to or less than 5 MMBtu/hr	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223.
13. New oil-fired boilers with heat input capacity of equal to or less than 5 MMBtu/hr	Conduct a tune-up of the boiler every 5 years as specified in §63.11223.
14. Existing coal-fired, biomass-fired, or oil-fired boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223.
15. New coal-fired, biomass-fired, or oil-fired boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up	Conduct a tune-up of the boiler every 5 years as specified in §63.11223.
16. Existing coal-fired, biomass-fired, or oil-fired boilers (units with heat input capacity of 10 MMBtu/hr and greater), not including limited-use boilers	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. Energy assessor approval and qualification requirements are waived in instances where past or amended energy assessments are used to meet the energy assessment requirements. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items (1) to (4) appropriate for the on-site technical hours listed in §63.11237:
	(1) A visual inspection of the boiler system,
	(2) An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints,
	(3) An inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator,
	(4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
	(5) A list of major energy conservation measures that are within the facility's control,
	(6) A list of the energy savings potential of the energy conservation measures identified, and

(7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
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[78 FR 7518, Feb. 1, 2013]

The requirements of Table 2 subcategories 6, 14, and 16 (only) apply to the facility boiler.

Table 3 to Subpart JJJJJJ of Part 63—Operating Limits for Boilers With Emission Limits

As stated in §63.11201, you must comply with the applicable operating limits:

If you demonstrate compliance with applicable emission limits using	You must meet these operating limits except during periods of startup and shutdown
1. Fabric filter control	a. Maintain opacity to less than or equal to 10 percent opacity (daily block average); OR b. Install and operate a bag leak detection system according to §63.11224 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6- month period.
2. Electrostatic precipitator control	 a. Maintain opacity to less than or equal to 10 percent opacity (daily block average); OR b. Maintain the 30-day rolling average total secondary electric power of the electrostatic precipitator at or above the minimum total secondary electric power as defined in §63.11237.
3. Wet scrubber control	Maintain the 30-day rolling average pressure drop across the wet scrubber at or above the minimum scrubber pressure drop as defined in §63.11237 and the 30-day rolling average liquid flow rate at or above the minimum scrubber liquid flow rate as defined in §63.11237.
4. Dry sorbent or activated carbon injection control	Maintain the 30-day rolling average sorbent or activated carbon injection rate at or above the minimum sorbent injection rate or minimum activated carbon injection rate as defined in §63.11237. When your boiler operates at lower loads, multiply your sorbent or activated carbon injection rate by the load fraction (e.g., actual heat input divided by the heat input during the performance stack test; for 50 percent load, multiply the injection rate operating limit by 0.5).
5. Any other add-on air pollution control type.	This option is for boilers that operate dry control systems. Boilers must maintain opacity to less than or equal to 10 percent opacity (daily block average).
6. Fuel analysis	Maintain the fuel type or fuel mixture (annual average) such that the mercury emission rate calculated according to §63.11211(c) are less than the applicable emission limit for mercury.
7. Performance stack testing	For boilers that demonstrate compliance with a performance stack test, maintain the operating load of each unit such that it does not exceed 110 percent of the average operating load recorded during the most recent performance stack test.
8. Oxygen analyzer system	For boilers subject to a CO emission limit that demonstrate compliance with an oxygen analyzer system as specified in §63.11224(a), maintain the 30-day rolling average oxygen level at or above the minimum oxygen level as defined in §63.11237. This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.11224(a)(7).

[78 FR 7519, Feb. 1, 2013]

Though the facility has a wet scrubber, the requirements of Table 3 do not apply because the boiler is not subject to an emission limit in accordance with 40 CFR 63.11201(a).

Table 4 to Subpart JJJJJJ of Part 63—Performance (Stack) Testing Requirements

As stated in §63.11212, you must comply with the following requirements for performance (stack) test for affected sources:

To conduct a performance test for the following pollutant	You must	Using
1. Particulate Matter	a. Select sampling ports location and the number of traverse points	Method 1 in appendix A-1 to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2F, or 2G in appendix A-2 to part 60 of this chapter.

	c. Determine oxygen and carbon dioxide concentrations of the stack gas	Method 3A or 3B in appendix A-2 to part 60 of this chapter, or ASTM D6522-00 (Reapproved 2005), or ANSI/ASME PTC 19.10-1981.
	d. Measure the moisture content of the stack gas	Method 4 in appendix A-3 to part 60 of this chapter.
	e. Measure the particulate matter emission concentration	Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A-3 and A-6 to part 60 of this chapter and a minimum 1 dscm of sample volume per run.
	f. Convert emissions concentration to lb/MMBtu emission rates	Method 19 F-factor methodology in appendix A-7 to part 60 of this chapter.
2. Mercury	a. Select sampling ports location and the number of traverse points	Method 1 in appendix A-1 to part 60 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2F, or 2G in appendix A-2 to part 60 of this chapter.
	c. Determine oxygen and carbon dioxide concentrations of the stack gas	Method 3A or 3B in appendix A-2 to part 60 of this chapter, or ASTM D6522-00 (Reapproved 2005), or ANSI/ASME PTC 19.10-1981.
	d. Measure the moisture content of the stack gas	Method 4 in appendix A-3 to part 60 of this chapter.
	e. Measure the mercury emission concentration	Method 29, 30A, or 30B in appendix A-8 to part 60 of this chapter or Method 101A in appendix B to part 61 of this chapter or ASTM Method D6784-02. Collect a minimum 2 dscm of sample volume with Method 29 of 101A per run. Use a minimum run time of 2 hours with Method 30A.
	f. Convert emissions concentration to lb/MMBtu emission rates	Method 19 F-factor methodology in appendix A-7 to part 60 of this chapter.
3. Carbon Monoxide	a. Select the sampling ports location and the number of traverse points	Method 1 in appendix A-1 to part 60 of this chapter.
	b. Determine oxygen and carbon dioxide concentrations of the stack gas	Method 3A or 3B in appendix A-2 to part 60 of this chapter, or ASTM D6522-00 (Reapproved 2005), a or ANSI/ASME PTC 19.10-1981.
	c. Measure the moisture content of the stack gas	Method 4 in appendix A-3 to part 60 of this chapter.
	d. Measure the carbon monoxide emission concentration	Method 10, 10A, or 10B in appendix A-4 to part 60 of this chapter or ASTM D6522-00 (Reapproved 2005) ^a and a minimum 1 hour sampling time per run.

^aIncorporated by reference, see §63.14.

The requirements of Table 4 do not apply because there is no source test requirement on the boiler

Table 5 to Subpart JJJJJJ of Part 63-Fuel Analysis Requirements

As stated in §63.11213, you must comply with the following requirements for fuel analysis testing for

attected	sources:

To conduct a fuel analysis for the following pollutant	You must	Using
1. Mercury	a. Collect fuel samples	Procedure in §63.11213(b) or ASTM D2234/D2234Ma (for coal) or ASTM D6323a (for biomass) or equivalent.
	b. Compose fuel samples	Procedure in §63.11213(b) or equivalent.
	c. Prepare composited fuel samples	EPA SW-846-3050B ^a (for solid samples) or EPA SW-846-3020A ^a (for liquid samples) or ASTM D2013/D2013M ^a (for coal) or ASTM D5198 ^a (for biomass) or equivalent.

d. Determine heat content of the fuel type	ASTM D5865 ^a (for coal) or ASTM E711 ^a (for biomass) or equivalent.
e. Determine moisture content of the fuel	ASTM D3173 ^a or ASTM E871 ^a or equivalent.
type	
f. Measure mercury concentration in fuel	ASTM D6722 ^a (for coal) or EPA SW-846-7471B ^a (for solid samples)
sample	or EPA SW-846-7470A ^a (for liquid samples) or equivalent.
g. Convert concentrations into units of	
lb/MMBtu of heat content	

^aIncorporated by reference, see §63.14.

The requirements of Table 5 do not apply because there is no fuel analysis requirement on the boiler.

Table 6 to Subpart JJJJJJ of Part 63—Establishing Operating Limits

As stated in §63.11211, you must comply with the following requirements for establishing operating limits:

mints				
If you have an applicable emission limit for	And your operating limits are based on	You must	Using	According to the following requirements
1. PM or mercury	a. Wet scrubber operating parameters	Establish site-specific minimum scrubber pressure drop and minimum scrubber liquid flow rate operating limits according to §63.11211(b)	Data from the pressure drop and liquid flow rate monitors and the PM or mercury performance stack tests	(a) You must collect pressure drop and liquid flow rate data every 15 minutes during the entire period of the performance stack tests;
				(b) Determine the average pressure drop and liquid flow rate for each individual test run in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run.
	b. Electrostatic precipitator operating parameters	Establish a site-specific minimum total secondary electric power operating limit according to §63.11211(b)	Data from the secondary electric power monitors and the PM or mercury performance stack tests	(a) You must collect secondary electric power data every 15 minutes during the entire period of the performance stack tests;
				(b) Determine the average total secondary electric power for each individual test run in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run.
2. Mercury	Dry sorbent or activated carbon injection rate operating parameters	Establish a site-specific minimum sorbent or activated carbon injection rate operating limit according to §63.11211(b)	Data from the sorbent or activated carbon injection rate monitors and the mercury performance stack tests	(a) You must collect sorbent or activated carbon injection rate data every 15 minutes during the entire period of the performance stack tests;
				(b) Determine the average sorbent or activated carbon injection rate for each individual test run in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run.
				(c) When your unit operates at lower loads, multiply your sorbent or activated carbon injection rate by the load fraction (e.g., actual heat input divided by heat input during performance stack test, for 50 percent load, multiply the injection rate operating limit by 0.5) to determine the required injection rate.
3. CO	Oxygen	Establish a unit-specific limit for minimum oxygen level	Data from the oxygen analyzer system specified in §63.11224(a)	(a) You must collect oxygen data every 15 minutes during the entire period of the performance stack tests;
				(b) Determine the average hourly oxygen concentration for each individual test run

4. Any pollutant for which compliance is demonstrated by a	Boiler operating load	Establish a unit-specific limit for maximum operating load according to §63.11212(c)	Data from the operating load monitors (fuel feed monitors or steam generation monitors)	in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run. (a) You must collect operating load data (fuel feed rate or steam generation data) every 15 minutes during the entire period of the performance test.
performance stack test				
				(b) Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test.

[78 FR 7520, Feb. 1, 2013]

The requirements of Table 6 do not apply because there is no operating limit requirement on the boiler.

Table 7 to Subpart JJJJJJ of Part 63—Demonstrating Continuous Compliance

As stated in §63.11222, you must show continuous compliance with the emission limitations for affected sources according to the following:

sources according to the	i tono ming.
If you must meet the following operating limits	You must demonstrate continuous compliance by
1. Opacity	a. Collecting the opacity monitoring system data according to §63.11224(e) and §63.11221; and
	b. Reducing the opacity monitoring data to 6-minute averages; and
	c. Maintaining opacity to less than or equal to 10 percent (daily block average).
Fabric Filter Bag Leak Detection Operation	Installing and operating a bag leak detection system according to §63.11224(f) and operating the fabric filter such that the requirements in §63.11222(a)(4) are met.
Wet Scrubber Pressure Drop and Liquid Flow Rate	a. Collecting the pressure drop and liquid flow rate monitoring system data according to §§63.11224 and 63.11221; and
	b. Reducing the data to 30-day rolling averages; and
	c. Maintaining the 30-day rolling average pressure drop and liquid flow rate at or above the minimum pressure drop and minimum liquid flow rate according to §63.11211.
Dry Scrubber Sorbent or Activated Carbon Injection Rate	a. Collecting the sorbent or activated carbon injection rate monitoring system data for the dry scrubber according to §§63.11224 and 63.11221; and
	b. Reducing the data to 30-day rolling averages; and
	c. Maintaining the 30-day rolling average sorbent or activated carbon injection rate at or above the minimum sorbent or activated carbon injection rate according to §63.11211.
5. Electrostatic Precipitator Total Secondary Electric Power	a. Collecting the total secondary electric power monitoring system data for the electrostatic precipitator according to §§63.11224 and 63.11221; and
	b. Reducing the data to 30-day rolling averages; and
	c. Maintaining the 30-day rolling average total secondary electric power at or above the minimum total secondary electric power according to §63.11211.
6. Fuel Pollutant Content	a. Only burning the fuel types and fuel mixtures used to demonstrate compliance with the applicable emission limit according to §63.11213 as applicable; and
	b. Keeping monthly records of fuel use according to §§63.11222(a)(2) and 63.11225(b)(4).
7. Oxygen content	a. Continuously monitoring the oxygen content of flue gas according to §63.11224 (This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.11224(a)(7)); and
	b. Reducing the data to 30-day rolling averages; and
	c. Maintaining the 30-day rolling average oxygen content at or above the minimum oxygen level established during the most recent CO performance test.
8. CO emissions	a. Continuously monitoring the CO concentration in the combustion exhaust according to

If you must meet the following operating	
limits	You must demonstrate continuous compliance by
	§§63.11224 and 63.11221; and
	b. Correcting the data to 3 percent oxygen, and reducing the data to 1-hour averages; and
	c. Reducing the data from the hourly averages to 10-day rolling averages; and
	d. Maintaining the 10-day rolling average CO concentration at or below the applicable emission limit in Table 1 to this subpart.
9. Boiler operating load	a. Collecting operating load data (fuel feed rate or steam generation data) every 15 minutes; and
	b. Reducing the data to 30-day rolling averages; and
	c. Maintaining the 30-day rolling average at or below the operating limit established during the performance test according to §63.11212(c) and Table 6 to this subpart.

Though the boiler has a wet scrubber, the requirements of Table 7 do not apply because the boiler is not subject to an emissions limit.

Table 8 to Subpart JJJJJJ of Part 63—Applicability of General Provisions to Subpart JJJJJJ

As stated in §63.11235, you must comply with the applicable General Provisions according to the following:

General provisions cite	Subject	Does it apply?		
§63.1	Applicability	Yes.		
§63.2	Definitions	Yes. Additional terms defined in §63.11237.		
§63.3	Units and Abbreviations	Yes.		
§63.4	Prohibited Activities and Circumvention	Yes.		
§63.5	Preconstruction Review and Notification Requirements	No		
§63.6(a), (b)(1)-(b)(5), (b)(7), (c), (f)(2)-(3), (g), (i), (j)	Compliance with Standards and Maintenance Requirements	Yes.		
§63.6(e)(1)(i)	General Duty to minimize emissions	No. See §63.11205 for general duty requirement.		
§63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	No.		
§63.6(e)(3)	SSM Plan	No.		
§63.6(f)(1)	SSM exemption	No.		
§63.6(h)(1)	SSM exemption	No.		
§63.6(h)(2) to (9)	Determining compliance with opacity emission standards	Yes.		
§63.7(a), (b), (c), (d), (e)(2)-(e)(9), (f), (g), and (h)	Performance Testing Requirements	Yes.		
§63.7(e)(1)	Performance testing	No. See §63.11210.		
§63.8(a), (b), (c)(1), (c)(1)(ii), (c)(2) to (c)(9), (d)(1) and (d)(2), (e),(f), and (g)	Monitoring Requirements	Yes.		
§63.8(c)(1)(i)	General duty to minimize emissions and CMS operation	No.		
§63.8(c)(1)(iii)	Requirement to develop SSM Plan for CMS	No.		
§63.8(d)(3)	Written procedures for CMS	Yes, except for the last sentence, which refers to an SSM plan. SSM plans are no required.		
§63.9	Notification Requirements	Yes, excluding the information required in		

General provisions cite	Subject	Does it apply?		
		§63.9(h)(2)(i)(B), (D), (E) and (F). See §63.11225.		
§63.10(a) and (b)(1)	Recordkeeping and Reporting Requirements	Yes.		
§63.10(b)(2)(i)	Recordkeeping of occurrence and duration of startups or shutdowns	No.		
§63.10(b)(2)(ii)	Recordkeeping of malfunctions	No. See §63.11225 for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunctions.		
§63.10(b)(2)(iii)	Maintenance records	Yes.		
§63.10(b)(2)(iv) and (v)	Actions taken to minimize emissions during SSM	No.		
§63.10(b)(2)(vi)	Recordkeeping for CMS malfunctions	Yes.		
§63.10(b)(2)(vii) to (xiv)	Other CMS requirements	Yes.		
§63.10(b)(3)	Recordkeeping requirements for applicability determinations	No.		
§63.10(c)(1) to (9)	Recordkeeping for sources with CMS	Yes.		
§63.10(c)(10)	Recording nature and cause of malfunctions	No. See §63.11225 for malfunction recordkeeping requirements.		
§63.10(c)(11)	Recording corrective actions	No. See §63.11225 for malfunction recordkeeping requirements.		
§63.10(c)(12) and (13)	Recordkeeping for sources with CMS	Yes.		
§63.10(c)(15)	Allows use of SSM plan	No.		
§63.10(d)(1) and (2)	General reporting requirements	Yes.		
§63.10(d)(3)	Reporting opacity or visible emission observation results	No.		
§63.10(d)(4)	Progress reports under an extension of compliance	Yes.		
§63.10(d)(5)	SSM reports	No. See §63.11225 for malfunction reporting requirements.		
§63.10(e)	Additional reporting requirements for sources with CMS	Yes.		
§63.10(f)	Waiver of recordkeeping or reporting requirements	Yes.		
§63.11	Control Device Requirements	No.		
§63.12	State Authority and Delegation	Yes.		
§63.13-63.16	Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions	Yes.		
§63.1(a)(5), (a)(7)-(a)(9), (b)(2), (c)(3)-(4), (d), 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv), 63.8(a)(3), 63.9(b)(3), (h)(4), 63.10(c)(2)-(4), (c)(9)	Reserved	No.		

Table 8 General Provisions apply as applicable.

40 CFR 63, Subpart ZZZZ National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

§63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at

major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

- (a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.
- (b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.
- (c) An area source of HAP emissions is a source that is not a major source.
- (d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.
- (e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

§63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

- (a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
 - (1) Existing stationary RICE.
 - (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.
 - (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
 - (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
 - (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.
 - (2) New stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.
 - (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

- (iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (3) Reconstructed stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.
 - (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.
 - (iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.
- (b) Stationary RICE subject to limited requirements. (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).
 - (i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
 - (ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
 - (2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.
 - (3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:
 - (i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
 - (ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
 - (iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
 - (iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
 - (v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
 - (vi) Existing residential emergency stationary RICE located at an area source of HAP emissions;
 - (vii) Existing commercial emergency stationary RICE located at an area source of HAP emissions; or
 - (viii) Existing institutional emergency stationary RICE located at an area source of HAP emissions.
- (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by

meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

- (1) A new or reconstructed stationary RICE located at an area source;
- (2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
- (4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

§63.6595 When do I have to comply with this subpart?

- (a) Affected sources.
 - (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.
 - (2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.
 - (3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.
 - (4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.
 - (5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

- (6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.
- (7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.
- (b) Area sources that become major sources. If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.
 - (1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.
 - (2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.
- (c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

§63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

- (a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you.
- (b) If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.

As stated in §63.6603, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

Table 2d to Subpart ZZZZ of Part 63 — Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions

For Each		You Must Meet the Following Operating Limitation	During periods of startup you must	
4.	Emergency stationary CI RICE and black start stationary CI RICE. ²	 a. Change oil and filter every 500 hours of operation or annually, whichever comes first;¹ b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. 	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.	

Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

§63.6605 What are my general requirements for complying with this subpart?

- (a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.
- (b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

§63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

- (e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
 - (2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

Permit Condition 6.8 includes the requirements of this section.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

Permit Condition 6.8 includes the requirements of this section.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

Permit Conditions 6.8 includes the requirements of this section.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If

all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

§63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

- (f) Requirements for emergency stationary RICE. (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.
 - (i) There is no time limit on the use of emergency stationary RICE in emergency situations.
 - (ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.
 - (iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

§63.6645 What notifications must I submit and when?

- (a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;
 - (2) An existing stationary RICE located at an area source of HAP emissions.

§63.6655 What records must I keep?

- (a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.
 - (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).
 - (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
 - (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
 - (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
 - (1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.
 - (2) An existing stationary emergency RICE.
 - (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.
- (f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
 - (1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.
 - (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

§63.6660 In what form and how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

7.7 CAM Applicability (40 CFR 64)

Purpose: The purpose of Compliance Assurance Monitoring (CAM) is to provide a reasonable assurance of compliance with applicable emission limitations or standards for pollutant-specific emission units that use control device equipment to achieve compliance. It is important to note that Part 64 establishes that only those emission limitations or standards that are applicable requirements as defined in Part 70 and included as Federally enforceable permit condition in a Part 70 permit are subject to the requirement of Part 64.

Applicability: Part 64 applies to BLP's Zurn hog fuel boiler (Boiler) because the Boiler (the pollutant-specific emissions unit) meets **all** of the applicability criteria set forth in §64.2 of the CAM rule as follows:

² Technical Guidance Document: Compliance Assurance Monitoring, Revised Draft, (Midwest Research Institute, Project No. 4701-05, 1998), p. 1-1

Those criteria are the following:

- §64.2(a) The emissions unit (unit) must be located a major source that is required to obtain a Part 70 (T1) permit; and
- §64.2(a)(1) The unit is subject to an emission limitation or standard for the applicable pollutant; and
- §64.2(a)(2) The unit uses a control device to achieve compliance; and
- §64.2(a)(3) The potential pre-control emissions of applicable pollutant from unit are at least 100% of the major source amount; and
- §64.2(b) The unit is not otherwise exempt from CAM.

CAM Plan: Once applicable to CAM, a facility is required to submit a CAM plan that describes the monitoring that will be used to provide a reasonable assurance of compliance with applicable emissions limitations or standards. The CAM rule requires that a CAM plan include the following criteria as applicable:

- §64.4(a)(1) Describe the indicators to be monitored;
- §64.4(a)(2) Describe the ranges or the process to set indicator ranges;
- §64.4(a)(3) Describe the performance criteria for the monitoring, including:
 - specifications for obtaining representative data
 - verification procedures to confirm the monitoring's operational status
 - quality assurance and control procedures
 - monitoring frequency
- §64.4(b) Provide a justification for the use of parameters, ranges, and monitoring approach;
- §64.4(c) Provide emissions test data, and, if necessary;
- §64.4(d) Provide an implementation plan for installing, testing, and operating the monitoring.

In accordance with §64.5(b), the deadline to submit a CAM plan for affected pollutant-specific emissions units with post-control potential to emit less than 100% of the major source amount is upon the first renewal of the initial Part 70 or T1 permit.³

In accordance with §64.6(b), if the monitoring proposed by the owner or operator requires installation, testing or final verification of operational status, the part 70 permit shall include an enforceable schedule with appropriate milestones for completing such installation, testing, or final verification consistent with the requirement in §64.4(e).

In accordance with §64.4(e), if the monitoring submitted by the owner or operator requires installation, testing, or other necessary activities prior to use of the monitoring for purposes of this part, the owner or operator shall include an implementation plan and schedule for installing, testing and performing any other appropriate activities prior to use of the monitoring. The implementation plan and schedule shall provide for use of the monitoring as expeditiously as practicable after approval of the monitoring in the part 70 or 71 permit pursuant to §64.6, but in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval of the permit.

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³ BLP's initial T1 permit expired on May 15, 2006. A T1 renewal application was received by DEQ for the initial permit on February 22, 2005. The renewal application contained the first CAM plan for the Boiler.

The monitoring proposed by BLP in the initial CAM plan required performance testing to establish ranges for the two performance indicators chosen – pressure drop across the scrubber and scrubber water flow rate – and required that the T1 permit be revised to incorporate the revised CAM plan.

In 2010, BLP conducted the required performance testing. The performance tests measured PM and PM_{10} emissions from the Boiler for compliance with the T1 permit⁴ and also provided the data necessary to establish the operating ranges for the performance indicators for the CAM plan. The T1 permit was then revised⁵ as required to incorporate the updated CAM plan. A summary of the revised CAM plan is provided below:

⁴ T1-050201, issued February 11, 2010

⁵ Revised T1-050201 Project 60630, issued January 17, 2011.

Emissions Unit:

Zurn Hog-fueled Boiler

Regulated Pollutant(s):

PM and PM₁₀

Emission Limit(s):

PM - 0.200 gr/dscf at 8% O₂, IDAPA 58.01.01.677

 $PM_{10} - 27 \text{ lb/hr}$ and 99.48 T/yr

Table 7.1 COMPLIANCE ASSURANCE MONITORING REQUIREMENTS FOR THE ZURN BOILER T1-050201 PROJ 60630, ISSUED JANUARY 17, 2011 (Revision of Feb. 11, 2010 T1 1st Renewal Permit)

	Indicator No. 1	Indicator No. 2
	Pressure Drop	Scrubber Flow Rate
Indicator Measurement Approach	The ID fan outlet pressure gauge is located at the ID fan outlet just upstream of the wet scrubber inlet. It represents the pressure drop across the wet scrubber, because gauge pressure downstream of the scrubber is zero since it exhausts to the atmosphere.	The scrubber water flow is measured using a flow meter located in the water supply header to the scrubber nozzles. Scrubber flow is determined by direct observation of the meter gauge.
Indicator Range	An excursion is defined as a pressure of less than 3.0 inches of water or greater than 7.5 inches of water.	An excursion is defined as a scrubber water flow of less than 350 gpm.
Performance Criteria	The ID fan outlet pressure is located upstream from the wt scrubber. The	The scrubber water flow meter is located in the water supply header.
Data Representativeness	monitor gauge is marked in 0.5 in H2O increments.	Manufacturer's specifications indicate the gauge is accurate to +/- 5% of actual flow
QA/QC Practices	Instrumentation is calibrated annually. It is observed daily; troubleshooting and maintenance will be initiated at any sign of questionably effective operation	No calibration required per manufacturer's specifications. Instrument is observed daily, troubleshooting, maintenance, or replacement will be initiated at any sign of questionably effective operation.
Monitoring Frequency	The ID fan outlet pressure is monitored continuously and recorded a minimum of once per day.	The wet scrubber water flow is monitored continuously and recorded a minimum of once per day.
Data Collection Procedure	The pressure shall be manually recorded in the boiler operating log.	The flow rate shall be manually recorded in the boiler operating log.
Averaging Period	Instantaneous (never to be exceeded)	Instantaneous (never to be exceeded)

During the five-year term of T1-050201(February 11, 2010-February 11, 2015), BLP made some improvements to the Boiler to enhance it efficiency. In a letter from BLP to DEQ received August 7, 2015⁶, BLP describes the efficiency upgrades which were made to the Boiler, some of which were driven by the area source Boiler MACT (Part 63, Subpart JJJJJJ). The improvements include:

- A one-time energy assessment and tune-up (Boiler MACT requirement);
- a force draft fan economizer;
- the installation of frequency drives on the forced draft fan and induced draft fan with updated controls; and
- an oxygen trim system⁷(Boiler MACT requirement).

The boiler efficiency upgrades did not affect the primary CAM indicator for the boiler, the scrubber water flow rate. Scrubber water flow rate has always been above the minimum flow of the CAM indicator of 350 gal/min.

The Boiler upgrades did have an effect on the other CAM indicator, the ID fan outlet pressure (effectively the scrubber pressure drop). The CAM plan sets this range between 3.0 and 7.5 inches of water. The pressure drop here is dictated mainly by the ID fan, effectively the force of air flow used to pull air away from the fire box and out to the exhaust. The variable speed fan drives (FD drive for forced air into the combustion chamber, and ID for induced draft out of the combustion chamber) are now coordinated, automated, and quicker and more effective in reacting to provide air flow conducive to better combustion. After the boiler enhancements were made it was noticed that with lower fan speeds the pressure drop was consistently near the lower end of the pressure drop range.

In July 2015, during the annual boiler shutdown for maintenance and repair, BLP replaced the scrubber separator and stack which was no longer structurally safe. The new equipment was manufactured to OEM specifications. Recordkeeping after the installation of the new equipment shows the ID Fan Outlet pressure trends at or below 1.5 inches water at moderate steam production loads without any opacity. The ID Fan Outlet pressure has been as low as 0.5 inches water at low steam production loads.

BLP has requested that DEQ set the ID Fan Outlet pressure drop range at 0.5 to 7.5 inches water. This indicator range takes the boiler efficiency upgrades into account and provides for maximum operational flexibility. The revised CAM plan for this T1 renewal is presented in the table below.

⁶ Trim 2015AAI1551

⁷ Oxygen trim system mean a system of monitorins that is used to maintain excess air at the desired level in a combustion device. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller.

Table 8.1 Compliance Assurance Monitoring Requirements for the Zurn Hog Fuel-fired Boiler

Emissions Unit:

Zurn Hog-fueled Boiler

Regulated Pollutant(s):

PM and PM₁₀

Emission Limit(s):

PM - 0.200 gr/dscf at 8% O2, IDAPA 58.01.01.677

 $PM_{10} - 27$ lb/hr and 99.48 T/yr

Tier I Operating Permit No. T1-2014.0031 Project 61408 (Revised CAM plan for this renewal)

INDICATOR	Wet Scrubber Pressure Drop (Measured as the ID fan outlet static pressure)	Wet Scrubber Water Flow Rate		
MONITORING DESIGN				
Measurement Approach	The ID fan outlet pressure gauge is located at the ID fan outlet just upstream of the wet scrubber inlet. It represents the pressure drop across the wet scrubber, because gauge pressure downstream of the scrubber is zero since it exhausts to the atmosphere.	The scrubber water flow is measured using a flow meter located in the water supply header to the scrubber nozzles. Scrubber flow is determined by direct observation of the meter gauge.		
Indicator Range	An excursion is defined as a pressure of less than 0.5 inches of water or greater than 7.5 inches of water.	An excursion is defined as a scrubber water flow of less than 350 gpm.		
PERFORMANCE CRITERIA				
Data Representativeness	The ID fan outlet pressure is located upstream from the wet scrubber. The monitor gauge is marked in 0.5 in. H ₂ O increments.	The scrubber water flow meter is located in the water supply header. Manufacturer's specifications indicate the gauge is accurate to +/- 5% of actual flow		
QA/QC Practices	Instrumentation is calibrated annually. It is observed daily; troubleshooting and maintenance will be initiated at any sign of questionably effective operation	No calibration required per manufacturer's specifications. Instrument is observed daily, troubleshooting, maintenance, or replacement will be initiated at any sign of questionably effective operation.		
Monitoring Frequency	The ID fan outlet pressure is monitored continuously and recorded a minimum of once per day.	The wet scrubber water flow is monitored continuously and recorded a minimum of once per day.		
Data Collection Procedure	The pressure shall be manually recorded in the boiler operating log.	The flow rate shall be manually recorded in the boiler operating log.		
Averaging Period	Instantaneous (never to be exceeded)	Instantaneous (never to be exceeded)		

BLP has not demonstrated that the Boiler complies with the PM and PM_{10} emission limits when operating at the low end of the wet scrubber pressure drop indicator range. DEQ is therefore requiring that the Boiler operate at the low end of the indicator range during at least one test run during the next scheduled PM and PM_{10} performance test(s).

7.8 Acid Rain Permit (40 CFR 72-75)

Bennett Lumber Products is not subject to any of the source categories under regulation 40CFR 72-75.

8. PUBLIC COMMENT

As required by IDAPA 58.01.01.364, a public comment period was made available to the public from September 21, 2016 to October 21, 2016. During this time, comments were submitted in response to DEQ's proposed action. A response to public comments document has been crafted by DEQ based on comments submitted during the public comment period. That document is part of the final permit package for this permitting action.

9. EPA REVIEW OF PROPOSED PERMIT

As required by IDAPA 58.01.01.366, DEQ provided the proposed permit to EPA Region 10 for its review and comment on February 1, 2017 via e-mail. On March 21, 2017, EPA Region 10 responded to DEQ via e-mail indicating no concerns.

Appendix A - Emissions Inventory

5.0 Emissions Information and Documentation

Emission Estimates

Table 5-1 below summarizes the facility-wide emission inventory, consistent with historic IDEQ air permitting and actual annual emission calculations.

Details of the emission calculations and methodology are documented in Appendix C.

Table 0-1 Total Potential Emissions for Bennett Lumber

Total Potential E	missions	- Benn	ett Lum	ber							i i		
Non-fugitive Emission	ns								Total				
Source	Particulate (tons/yr)	PM 10 (tons/yr)	PM2.5 (tons/yr)	VOC's (tous/yr)	SO 2 (tons/yr)	CO (tons/yr)	NOx (tons/yr)	CO2 equiv (tons/yr)	EPA HAPs (tons/yr)	Acetald (tons/yr)	Formaldehyde (tons/yr)	Methanol (tons/yr)	ropionaldehyde (tons/yr)
Dry Kilns	3.94	3.94	3.94	110.31	NA	NA	NA		19.18	4.491	0.725	14.419	0.252
Process (excl kilns)	11.74	9.29	8.59	0.00	NA	NA	NA		4.07	3.800	0.267	0.000	0.000
Generator	0.00	0.00	0.00	0.01	0.00	0.02	0.73	71.43	0.10	0.002	0.005	0.000	
Boiler	99.48	99.48	99.48	12.13	7.98	249.00	70.22	67411.73	5.09	0.265	0.670	0.265	0.019
Subtota	115.2	112.7	112.0	122.4	8.0	249.0	71.0	67483.2	24.4	8.558	1.667	9.9	0.272
									permit limit			permit limit	

Fugi	itive	I'mi	icei	one

									Total			
Source	Particulate	PM 10	PM2.5	VOC's	SO 2	co	NOx	CO2 equiv	EPA HAPs	Acetald	Formaldehyde	Methanol
	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Fugitive - Roads	1.00	3.60	0.54	NA	NA	NA	NA		NA	NA	NA	NA
Transfer - Conveyors	6.27	2.19	1.10	NA	NA	NA	NA		NA	NA	NA	NA
Transfer - Trucks	2.14	0.75	0.37	NA	NA	NA	NA		NA	NA	NA	NA
Storage - Piles	0.30	0.16	0.02	NA	NA	NA	NA		NA	NA	NA	NA
Storage - Bins	3.09	1.79	0.90	NA	NA	NA	NA		NA	NA	NA	NA
Solvents	NA	NA	NA	0.18	NA	NA	NA		0.08	NA	NA	NA
Subtota	I 12.8	8.5	2.9	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Fugitive PM2.5 / PM10	raction from	ODEQ AQ	EF08									
						:						
ANTWIDE TOTAL	128.0	121.2	114.9	122.6	8.0	249.0	71.0	67483.2	24.5	8.6	1.7	9.9

Appendix B - Facility Comments for Draft Permit

Comment #1:

Permit Condition 3.19 is not applicable at BLP.

DEQ Response to Comment #1:

Permit Condition 3.19 is the following:

Accidental Release Prevention

- 3.19 A permittee of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the "Chemical Accident Prevention Provisions" at 40 CFR 68 no later than the latest of the following dates:
 - Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130.
 - The date on which a regulated substance is first present above a threshold quantity in a process

[40 CFR 68.10(a)]

Permit Condition 3.19 is a generally applicable permit condition that is a standard permit condition in T1 operating permits. This condition has historically been in BLP's T1 permit. Because of its general applicability to T1 sources, DEQ has elected not to delete the condition from the permit.

Comment #2:

[Comment is in regard to Permit Condition 3.21, Table 3.2, NESHAP Part 63, Subpart A – General Provisions Summary] Why does this have to be here, Things that apply are listed below and applicability is in SOB, makes permit bulky (51 pages) and potentially confusing because it includes things that don't apply at BLP.

DEQ Response to Comment #2:

Permit Condition 3.21, Table 3.2 contains a summary of the general provision to Part 63. This permit condition is broad in scope and is intended to apply to the majority of sources subject to Part 63. As is the case with overarching permit conditions, some conditions may or may not apply which leaves applicability determinations up to the permittee.

BLP is subject to Part 63, Subpart JJJJJJ (6J). Conveniently, Subpart 6J includes a summary table of general provisions that are specifically applicable to sources subject to Subpart 6J.

In this case, it makes sense to include the general provisions summary table that is specific to the source being regulated. DEQ has therefore elected to remove Permit Condition 3.21, Table 3.2 from the permit, but include the source-specific general provisions summary table which is Table 8 in section 4 of the permit.

Comment #3:

[Comment is in regard to Permit Condition 4.7 – Performance Testing] For IFG Grangeville, IDEQ interpreted the every 5 year rule to be in the calendar year 2020, not within 5 years of the actual 2015 date. On that precedent, we request "during the year 2020" rather than prior to July 28, 2020"

DEQ Response to Comment #3:

BLP's T1 permit requires the following condition with respect to performance testing: After the initial performance test, future testing shall be performed according to the following schedule. If the PM or PM10 emission rate measured in the most recent test is less than or equal to 75% of the applicable emission limit, the next test shall be conducted within five years of the test date. The last approved PM10 performance test test

date was July 28, 2015. Per the permit condition, the next applicable performance test would then be required to be conducted by July 28, 2020, which is within 5 years of the test date.

Comment #4:

[Comment is again regarding performance testing] [The] low end test run is one time, not ongoing. BLP can't directly control pressure drop, might not go below 1" at 20000 lbs/hr; so the provisions for the one time one run test provision should say "steam rate as high as possible near or above 20000 lbs/hr"

DEQ Response to Comment #4:

In July 2015, during the annual boiler shutdown for maintenance and repair, BLP replaced the scrubber cylone separator and stack which was no longer structurally safe. The new equipment was manufactured to OEM specifications. Recordkeeping after the installation of the new equipment shows the ID Fan Outlet pressure trends at or below 1.5 inches water at moderate steam production loads without any opacity. The ID Fan Outlet pressure has been as low as 0.5 inches water at low steam production loads.

Subsequent to the July 2015 stack replacement, BLP requested that DEQ set the ID Fan Outlet pressure drop range at 0.5 to 7.5 inches water. This indicator range takes the boiler efficiency upgrades into account, including the scrubber cyclone separator stack replacement, and provides for maximum operational flexibility. The revised CAM plan for this T1 renewal includes the requested indicator range.

In a May 9, 2016, letter from DEQ to BLP, DEQ provided the following conditional approval: DEQ is approving a change to the lower end of the pressure drop range to 0.5 inches of water, however DEQ is also requiring that at least one source test run be conducted at a pressure drop of ≤ 1.0 inches water during the next required particulate matter test to verify that the scrubber is operating appropriately at low air flow rates. The boiler steaming rate shall be $\geq 20,000$ lb steam/hr during the test run(s) conducted to verify compliance at the low scrubber pressure drop.

The conditional PM_{10} performance test requirement is being required because BLP has not yet demonstrated that the boiler can meet the PM_{10} emissions limit at the low end of the pressure drop indicator range at lower steam production. If BLP can demonstrate that the boiler complies with the emissions limit under these conditions, then no further testing under these conditions is required.

Comment #5:

[Comment is in regard to Permit Condition 4.16 which requires a Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler] Completed these requirements in 2014, recommend that that text is no longer needed in permit. Please remove what doesn't apply or already permanently complied with

DEQ Response to Comment #5:

The Notification of Compliance Status report if an on-going requirement that applies to each boiler tune-up. It is not a one-time requirement.

Comment #6:

[Comment is in regard to Permit Condition 4.18] We do have an oxygen trim system, so bienniel requirement in 4.18 doesn't apply. Recommend eliminating references to bienniel, saying only every five years

DEO Response to Comment #6:

DEQ agrees with comment. The applicable tune up frequency is every 5 years. Therefore, the reference to bienniel has been eliminated.

Comment #7:

[Comment is in regard to Table 8 Subpart JJJJJJ, General Provisions to Subpart JJJJJJ] Bill, Though the legaleze is hard to follow, I don't think these federal regs apply, at least no more than the IDEQ permit conditions historically and now have. Should have same applicability as other mills I work with (ex, IFG Grngeville)

DEQ Response to Comment #7:

This T1 permit renewal is the first time that the area source boiler MACT has been incorporated into BLP's T1 permit. The requirement is new, hence the permit conditions are new. This permit is consistent with the IFG Grangeville T1 permit.